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A Note from the Editor

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2020-2021 was a transitional time for so many individuals in our field. From confronting the challenges of moving in-person programs to online, synchronous formats; to pivoting back to in-person learning and establishing a safe environment to welcome students back to campus; this past year has represented a rededication back to our teaching, to our professional development, and most especially to the circulation of cutting-edge ideas and practices on experiential education. Beyond our scholarly and professional endeavors, this past year has also been a transitional time for the journal's Editorial Board, and we would like to thank our outgoing Editor-in-Chief, Kevin Dvorak, for all his hard work and dedication to this publication and to the field. The readerly enjoyment *ELTHE* offers is a direct result of Kevin's vision, and it is the personal aim of this Editorial Board to carry this vision forward.

The articles featured in *ELTHE* 4.1 are furthermore representative of the aforementioned theme of transition. As we return to in-person learning, Karen Stock and David Kolb's "The Experiencing Scale: An Experiential Learning Gauge of Engagement in Learning," investigates the theory and practice of experiential learning. Steeped in Experiential Learning Theory (ELT), the authors wonder "What kind of experiences lead to what kind of learning? What is the process that turns experience into learning?" (3). The article offers insights to these important questions.

Matthew Fifolt, Meena Nabavi, Erika L. Austin, and Lisa C. McCormick's article, "Building Cultural Competency Among Emerging Public Health Professionals: Student Experiences in Panama," investigates a six-credit, 2019 study abroad course that explored population health in Panama. The course offered students an opportunity to view healthcare through a cultural lens, and the authors argue that such study abroad and service-learning programs establish strategies for enhancing students' understanding of cultural competency.

In "Entrepreneurship Education and Experiential Learning in Higher Education," Sophia N. Koustas and Elham Shahidi Salehi conduct an exploratory qualitative study of five entrepreneurship courses at Southern New Hampshire University. By analyzing these courses, the authors explore the important relationship between entrepreneurial outcomes learned through entrepreneurship educational endeavors, and how these learning outcomes develop students' skills and knowledge to satisfy current industry needs.

Thomas Mondschean and Melissa Markley Rountree, writing in "Experiential Learning through Short-Term Study Abroad: A Business Approach," lend credence to various models for designing and assessing study abroad programs. Specifically, through an analysis of short-term study abroad programs (Ireland, Northern Ireland, Switzerland), the authors show how these programs encourage students to leave their comfort zones, to learn through engagement and discussion in unfamiliar cultural environments.

In "Coaching and Experiential Learning in an MBA Leadership Certificate Program," Stephanie Thomason and Kamilla Andersen explore the pivotal role coaches play in training and developing current business students into future leaders. By utilizing Kolb and Kolb's (2017) framework, the authors examine numerous reflection papers from a coaching perspective in an MBA leadership certificate program. The authors argue for the increased need for coaches and MBA programs given the many beneficial outcomes coaching leads to.

In "Exploring the Catalyst Energizing the Kolb Learning Cycle," Marc Behrendt and Krisanna Machtmes explore the "driving force" of learning cycles (Naeem Akhtar, 2020). In their article, the authors provide answers to what compels learners to test new knowledge and create new experiences; examine the catalyst that initiates the learning experience; and interrogate what causes the learning cycle to conclude.

Finally, in "Communities of Practice in Academic Administration: An Example from Managing Undergraduate Research at a Research-Intensive University," the authors argue for the increased facilitation of undergraduate research experiences (UREs), especially given the benefits these experiences offer students. The article explores how a large research-intensive university in the Pacific Northwest navigated the COVID-19 pandemic to ensure that students enrolled in UREs continued to achieve their personal and professional gains.

Indeed, whether the focal point of experiential education is in-person learning or study abroad programs, the articles that comprise *ELTHE* 4.1 celebrate a transition back to learning through first-hand experience. We are excited to share these articles with you and hope they provide guidance to educators and practitioners as we press forward in this current academic year.

Lastly, with an eye towards the 50th anniversary celebration of the NSEE conference, *ELTHE* would like to extend its sincerest thank you to the following individuals: Marianna Savoca and the entire NSEE Board of Directors for their continued support of this publication; Patrick Green and the NSEE Research and Scholarship Committee, whose critical ideas for how to deepen and develop this journal proliferate many of the pages to follow; Marti Snyder, Paul Gaszak, and the entire NSEE Conference Planning Committee for their continued commitment to *ELTHE*.

Onward and upward. ■

The Experiencing Scale: An Experiential Learning Gauge of Engagement in Learning

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The idea that experience is necessary for learning is widely accepted. The term "learning" is often defined as "the acquisition of knowledge or skills through experience, study, or by being taught," or "modification of a behavioral tendency by experience" ("Learning," n.d.). Yet our understanding of the concept of experience and its role in learning remains unclear. For those of us who are involved in the theory and practice of experiential learning, this lack of clarity is particularly problematic. Teachers in higher education who wish to make experiential learning a part of their practice are given little guidance. They need to know: What kind of experiences lead to what kind of learning? What is the process that turns experience into learning?

Experiential Learning Theory

In this study we examine these questions from the perspective of Experiential Learning Theory (ELT—Kolb, 2015, Kolb & Kolb, 2017a&b). We focus on the views of ELT's foundational scholars, especially William James and John Dewey. Their works highlight key differences between two kinds of experience: James' concept of pure experience—in the moment perceptual experiencing of the world "just as it is" without conceptual interpretation (1912), and Dewey's concept of empirical experience—the on-going, often unexamined, daily flow of experience that is laden with cultural interpretation and is conservative, tradition bound and prone to conformity and dogmatism (1933).

James and Dewey created the philosophy of pragmatism together and initially Dewey endorsed and expanded upon James' radical empiricism and its concept of pure experience. Later in his career however he came to believe that social, cultural, and historical forces permeated everyone's experience in a way that anything resembling a pure experience would be rare. So much so, that in the 1951 revision of his master classic Experience and Nature he considered changing the title to Culture and Nature, "because of my growing realization that the historical obstacles which prevented understanding of my use of 'experience' are, for all practical purposes, insurmountable" (Dewey & Boydston, 2008, p 361).

Yet pure experience remained important to him, particularly with regard

to learning. Dewey emphasized that the traditional flow of empirical experience must be interrupted to initiate reflection and learning. He observed that the reflective process seemed to be initiated only when the preconceptions that block experiencing are disrupted by being 'stuck' with a problem or difficulty or 'struck' by the strangeness of something outside of our usual experience (Dewey, 1933; Humphry, 2009). Here in his emphasis that stuck or struck moments of intense, direct experiencing are a key to unlocking learning, he is joining with James on the transformative power of pure experiencing.

The culture laden flow of empirical experience produces rote or surface learning, a preoccupation with unreflective strategies, such as memorizing without understanding and uncritically following teachers' instructions or an intention to learn facts in order to pass a course with a lack of interest and engagement. Experiencing on the other hand, stimulates a deep learning approach as obstacles and surprises promote intrinsic interest in understanding by gathering information, relating ideas to each other and drawing conclusions (Marton & Saljo, 1976; Ramsden, 1992; Biggs, 1987; Entwistle, 1981).

Other ELT foundational scholars have also made experiencing a central concept in their work on learning and development. Those who focused on experiencing and have elaborated on its qualities include Carl Rogers, Paulo Freire, Kurt Lewin and Mary Parker Follett, who in *Creative Experience* (1924) gave the following warning about blindly following empirical experience, emphasizing that past conceptions must be reviewed and integrated with ongoing immediate experiencing:

> The people who 'learn by experience' often make great messes of their lives, that is, if they apply what they have learned from a past incident to the present, deciding from certain appearances that the circumstances are the same, forgetting that no two situations can ever be the same... All that I am, all that life has made me, every past experience that I have had - woven into the tissue of my life - I must give to the new experience. That past experience has indeed not been useless, but its use is not in guiding present conduct by past situations. We must put everything we can into each fresh experience, but we shall not get the same things out which we put in if it is a fruitful experience, if it is part of our progressing life... We integrate our experience, and then the richer human being that we are goes into the new experience; again we give our self and always by giving rise above the old self (pp. 136-137).

Experiencing and Learning

The experiential learning cycle (Kolb, 2015) describes a learning process where experiencing (formally known in ELT as Concrete Experience) is a gateway to learning in a recurring cycle of experiencing, reflecting, thinking, and acting:

- Experiencing in a particular situation, such as a class lecture, a work problem, or a family conversation, arouses perplexity, curiosity and interest.

- Reflecting begins learning from the experience by working to notice and understand key aspects of it.

- Thinking analyzes these aspects

to create conclusions and evaluate decision choices.

• Acting to implement a chosen decision leads to a new situation with emergent consequences to deal with.

The learning cycle is driven by two opposing dialectic dimensions, the transforming dimension of acting/reflecting and grasping dimension of experiencing/thinking (See Figure 1). In the cycle of learning learners receive information through experiencing and transform it by reflecting and thinking and then transform it again by acting to change the world. They are both receivers and creators of knowledge.

Figure 1. The Experiential Learning Cycle (Kolb, 2015)

Because of the dialectic competition between experiencing and thinking, how deeply one is engaged in experiencing depends on both the thinking and experiencing modes. In the experiencing mode of grasping or understanding the world, we understand the world immediately and directly through an exquisite system of perceptual senses that include the big five senses of vision, hearing, touch, taste and smell, plus a host of lesser known senses of direction and balance, kinesthetic proprioception, pain, and internal body functions including feelings and emotions. This is in contrast to the thinking mode where understanding of the world is grasped through remembered ideas and concepts. The idea that experiencing and thinking are dual modes of understanding the world is consistent with a number of contemporary dual processing theories in cognitive psychology (Evans, 2008); most notably Daniel Kahneman's *Thinking, Fast and Slow* (2011). He says we have two selves, an experiencing self that lives briefly in each moment of perception and a remembering/thinking self that is constructed through remembered memories of concrete experiences that have been given meaning through cognitive interpretation. Unlike the experiencing self, the remembering/thinking self is relatively stable and permanent. "It is a basic fact of the human condition that memories are what we get to keep from our experience, and the only perspective we can adopt as we think about our lives is that of the remembering/thinking self" (Kahneman & Riis, 2005, p. 286).

We make our choices with the thinking self though this is not always the best basis for decision making. The way that we remember and think about our experiences is very different than the process of experiencing--our minds create illusions that impact how we remember experiences. For example, we often give more weight to our most recent experience. This can cause us to remember an event that ended well as a positive event, even if it was filled with painful experiences. The learning cycle integrates the experiencing self and

thinking self through the transformation dimension of reflection and action. This can be thought of as an internal conversation between the perspectives of the experiencing and thinking selves.

In sum, ELT describes the role of experiencing in the learning process as a gateway to engagement in learning cycle. Opening oneself to experiencing the present moment fully through all of one's senses and internal feelings sparks reflection about all of the perspectives and paradoxes inherent in one's situation. This reflection leads to conceptualization and ultimately in action on one's experience.

The Experiencing Scale

Notwithstanding the above, we are left with many questions about the experiencing process. What are the qualities that define the experiencing process? How can we know if our students are experiencing what we teach? Can we teach them how to engage in experiencing? The purpose of this study is to seek answers to these questions by formulating a conceptual foundation for the experiencing concept that integrates insights from four different contemporary traditions of experiencing research, Focusing, Flow, Mindfulness, and Absorption. We attempt to validate our conceptual integration through the construction of The Experiencing Scale, a self-reported gauge of one's level of experiencing in a given context.

In an earlier study (Stock, 2014) examined the role of experiencing in a study of participants who participated in an equine-assisted management development program. In that study she used a modified version of Tellegen & Atkinson's (1974) Absorption Scale to measure how deeply participants were experiencing the program. Her findings indicated that experiencing significantly mediated the relationships between program characteristics--learner centered facilitation, psychological safety and the natural setting—and post-program outcomes of increased critical reflection and creativity.

Encouraged by these findings, we set out in this study to build a more rigorous Experiencing Scale derived from the broader literature on experiencing. We identified four distinct traditions of experiencing research—Focusing, Flow, Mindfulness and Absorption. Each of these traditions has generated a large body of scholarly research and Focusing, Flow and Mindfulness, in particular, have seen many programs of practical application aimed at developing a state of experiencing.

Focusing is an embodied way of experiencing that which is beneath thought, language and emotion. "In focusing one pays attention to the 'felt sense.'…A felt sense is body and mind before they are split apart" (Gendlin, 1978, p. 165). Eugene Gendlin developed a 6-step approach to Focusing that became an international network supporting individuals and groups in the practice and teaching of Focusing and its underlying philosophy (www.focusing.org). Gendlin's work began with the investigation of Carl Rogers' concept of experiencing (Rogers, 1961) and its role in the process of psychotherapy. He found that patients' capacity for experiencing predicted therapeutic outcomes better than what the therapist does; a capacity that was measurable in how the patient talked in the first two sessions. Therapists assist clients in being able to

recognize bodily sensations, learn from and respond to the felt sense to elicit more effective outcomes from therapy (Hendricks, 2007). When integrated with academic learning, there have been mixed results. On one hand, this embodied way of recognizing bodily shifts when acquiring new knowledge was found to be a way of deepening creativity and becoming more mindful (Netzer & Mangano, 2010). On the other, when utilized to develop intuitive awareness in management education, the technique was found to be less effective since participants felt it was difficult to master on their own and required expert training to be effective (Sadler-Smith & Shefy, 2007).

Flow "is a state of total engagement in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it" (Csikszentmihalyi, 1991, p. 4). Derived from psychological research on the "optimal experience," the flow state elicits a positive state of mind and happiness which increases overall well-being. While experiencing flow, one feels totally absorbed in an experience, loses all feelings of self-consciousness and is in control. Experiencing flow in relation to learning has been widely applied in online learning, design of game-based computer programs and virtual immersive environments (Pearce, et. al, 2005; Perttula e. al, 2017; Van Schaik, et. al, 2012). Connections between flow and interest in lifelong learning have also been found to be significant in that being in a state of flow and experiencing optimal engagement, which is more likely to occur during experiential learning activities, serves as motivation to continue learning (Sibthorp et al, 2011).

Mindfulness has been studied and practiced for centuries. and is currently widely used in education and personal development programs. In *Mindful Learning* Ellen Langer defines it as "a flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context" (Langer, 2000, p. 220). It is measured by the Langer Mindfulness Scale (Bodner, 2000). Another leading mindfulness scholar Jon Kabat-Zinn (1994, 2003) describes being mindful as living in the present moment, aware of ourselves and others as we take in the here and now in a non-judgmental way. Mindfulness is often measured by Brown &Ryan's Mindful Attention Awareness Scale (Brown & Ryan, 2003) which measures experiencing by negative endorsement of states which interfere with it, e.g. "I find myself doing things without paying attention". In relation to experiential learning, mindfulness has been shown to help individuals learn from experience by encouraging a focus on the experience at hand without any bias, as well as guiding participants through the stages of the learning cycle by paying attention and noticing shifts (Yeganeh & Kolb, 2009). Mindfulness may also facilitate learning and the transfer of knowledge (Salomon & Globerson, 1987), and studies involving adventure education often cite mindfulness as a learning outcome from the experience (Passarelli, et. al, 2010; Raiola, 2003).

Absorption "is interpreted as a disposition for having episodes of "total" attention that fully engage one's representational (i.e., perceptual, enactive, imaginative, and ideational) resources" (Tellegen & Atkinson, 1974, p. 268). The authors developed the Absorption Scale

to identify a person's hypnotic susceptibility by measuring the ability of a person to become immersed in the experience. This kind of attentional functioning is believed to result in a heightened sense of the reality of the attentional object, imperviousness to distracting events, and an altered sense of reality in general, including an empathically altered sense of self. Individuals rating high in absorption possess effortless experiencing while engaged in creative tasks (Bowers, 1978; Manmiller et. al, 2005). Absorption also facilitates and reflects a motivational readiness towards experiential involvement (Wild et. al, 1995).

Research Method and Design

Using a deductive approach, the major concepts in each of the four theories were identified and a pool of self-descriptive items that represented them was created. Each of the original 20 items include two opposing statements in a sematic differential format (Osgood et al., 1957) describing the experiencing state and a state which interferes with experiencing. These items are shown in Table 1 along with a primary source to where the items can be mapped. (Clarke, 2003).

Table 1. A Mapping of Experiencing Scale Items and Experiencing Theory Source

Semantic Differential Items			**Theory Source**
It was fresh & new.	< >	It was pretty much as I expected.	Mindfulness (Langer)
I was deeply involved.	< >	I was uninvolved.	Absorption (Tellegen & Atkinson)
I didn't notice the passage of time.	< >	I was aware of time passing.	Flow (Csikszentmihalyi)
I recall the experience vividly.	< >	Details of the experience are difficult to recall.	Absorption (Tellegen & Atkinson)
I was alert and aware.	< >	I was easily distracted.	Flow (Csikszentmihalyi)
I actively participated.	< >	I did not participate.	Flow (Csikszentmihalyi)
My senses were engaged.	< >	My senses were not engaged.	Focusing (Gendlin)
I was fully present.	< >	I was somewhere else.	Mindfulness (Kabat-Zinn)
I was "in the flow".	< >	I felt resistant.	Flow (Csikszentmihalyi)
I was not self-conscious.	< >	I was self-absorbed.	Absorption (Tellegen & Atkinson)
I understood it intuitively.	< >	I understood it intellectually.	Focusing (Gendlin)
My attention was focused.	< >	My attention wandered.	Mindfulness (Kabat-Zinn)
I felt connected and whole.	< >	I felt scattered.	Focusing (Gendlin)
I was in the here-and-now.	< >	I was there-and-then.	Mindfulness (Kabat-Zinn)

The experience was emotional.	< >	I had no emotional reactions.	Focusing (Gendlin)
I saw things in new ways.	< >	My views did not change.	Mindfulness (Langer)
I responded to what was happening	< >	I was on "automatic pilot."	Mindfulness (Kabat-Zinn)
I learned something new.	< >	I didn't learn anything new.	Mindfulness (Langer)
I felt a sense of oneness with the natural world.	< >	I did not feel a connection with the natural world.	Absorption (Tellegen & Atkinson)
I felt the experience in my body.	< >	I had no bodily sensations.	Focusing (Gendlin)

Prior to testing the scale, the items were shared with colleagues in various contexts in order to pre-test the items using a "think aloud" approach to address any cognitive difficulties in answering questions (Bolton, 1993). Minor wording changes and instructions as to how to complete the questionnaire were added. A quantitative multivariate research study was conducted with data from undergraduate students enrolled in an upper-level Management and Organizational Behavior course at Walsh University, with the approval of the University's Institutional Review Board from the fall of 2017 through 2019. A convenience sampling method resulted in obtaining 270 completed questionnaires. These subjects consisted of undergraduate students ranging in age from 19-22, who completed a questionnaire following an experiential classroom activity which was expected to be beneficial in future work environments. The experiential activities took place during a 90-minute class session and included role plays, blind-folded exercises, and games specifically designed to teach concepts of Organizational Behavior with an experiential approach (Osland et al., 2007).

Statistical Analysis

In the development of a new scale, Hinkin (1998) suggests to first determine the internal consistency of the scale as a whole, followed by exploratory factor analysis to allow for a reduction of a set of variables and confirmatory factor analysis to determine if prior analysis has been thoroughly conducted. Using SPSS 25 we calculated the internal consistency of the twenty-item experiencing scale. Cronbach's alpha for the scale was .932, indicating a high degree of internal consistency among the items in the scale. The means (M) of the individual items ranged from 3.50-5.60, with a mean on the total scale of 99.07 and a standard deviation (SD) of 20.43. Overall, the participants' responses on the scale indicated that they possess a fairly high degree of experiencing. The mean and standard deviation of the items of the experiencing scale are provided in the Table 2 below.

Additional analysis was conducted in order to establish reliability and validity. According to Hair, et al. (2010), reliability is defined as "the extent to which the variables are consistent in what they are intended to measure (p. 93)" and validity is defined as "the extent to which the set of measures correctly represent the concept of study (p. 94)." First, Exploratory Factor Analysis (EFA) was conducted to identify factors and initial factor reliability and validity, then Confirmatory Factor

Table 2. Mean and Standard Deviation of the Experiencing Scale Items

Item	M	SD
It was fresh & new	5.14	1.688
I was deeply involved	5.17	1.514
I didn't notice the passage of time	4.91	1.764
I recall the experience vividly	5.49	1.313
I was alert and aware	5.43	1.419
I actively participated	5.60	1.451
My senses were engaged	5.19	1.416
I was fully present	5.48	1.424
I was in the flow	5.30	1.345
I was not self-conscious	4.96	1.396
I understood it intuitively	4.97	1.454
My attention was focused	5.36	1.494
I felt connected and whole	4.95	1.474
I was in the here and now	5.27	1.413
The experience was emotional	3.61	1.821
I saw things in new ways	4.59	1.689
I responded to what was happening	5.26	1.406
I learned something new	5.07	1.601
I felt a sense of oneness with the natural world	3.82	1.685
I felt the experience in my body	3.50	1.937

Analysis (CFA) was conducted to further test how well the theorized constructs fit the data. Hair et. al. (2010) also suggests that an EFA and CFA are necessary when items in a scale are adapted from previous use and utilized in a new context.

Exploratory Factor Analysis

An EFA was conducted using Maximum Likelihood Analysis, Promax rotation in SPSS 25. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .936, suggesting excellent adequacy in the EFA. The Bartlett's Test of Sphericity result was significant ($p < .001$), confirming that there were correlations in the data set that were appropriate for factor analysis (Raykov & Marcoulides, 2011). When examining the output, we deleted 2 items (I recall the experience vividly and I understood it intuitively) that did not load significantly onto one factor. As shown in Table 3, reliability, as measured by Cronbach's Alpha (α), was higher than .70 for each subscale, or factor and the total variance explained in the scale is adequate at 58.31% (Churchill, 1979). Intercorrelations among factors are presented in Table 4 and indicate discriminant validity is achieved as the correlations between factors do not exceed .70.

Table 3. Summary of 3 Factors Resulting from EFA

Factor	# of Items	Eigenvalue	Variance Explained	Reliability α
Presence	12	8.38	46.56%	.94
Embodiment	3	1.57	8.74%	.77
Novelty	3	.54	3.00%	.75
Total Scale			58.31%	

Table 4. Correlation Matrix among the Experiencing Scale Factors

Factor	1	2	3
1	1.00		
2	.412	1.00	
3	.656	.618	1.00

We suppressed the factor loadings to display only factors above .350 with an eigenvalue of greater than 1, which is significant for a sample size of 250 (Hair et al., 2010, p. 117) and three distinct sub-concepts or factors emerged from the data, as shown in Table 5. Based on the description of the item within each group, we labeled the factors to be called Presence, Embodiment and Novelty.

Confirmatory Factor Analysis

The 18 items remaining in the scale (see Appendix A) were then analyzed using confirmatory factor analysis (CFA) in IBM SPSS AMOS 26 to revalidate the Experiencing Scale's structure. We added a common latent factor to test for method bias and performed the Common Methods Bias Test where we compared the unconstrained common method factor to the constrained model and ran a X2 Difference Test. Results indicate significant shared variance which led us to retain the common latent factor (CLF) for computing factor scores. We expected method bias since the data was gathered using a single common method. Therefore, in accounting for method bias by the Podsokoff et al., (2003) method, the model fits the data (with CFI = .97, GFI= .93, and RMSEA = .05).

Reliability and validity of the scale were examined. As shown in Table 6, we computed composite reliability (CR) for each factor and found it to be above the minimum threshold of 0.70 (Fornell & Larcker, 1981). We calculated the average variance extracted (AVE). For all factors, the AVE was above .50, which indicates adequate convergent validity, i.e. measures of the same concepts are correlated (Hair, et. al., 2010). In order to test for discriminant validity, i.e. the degree to which conceptually similar concepts are distinct, we then calculated the maximum shared variance (MSV) and compared this to the average variance extracted (AVE), (Hair, et.al, 2010). While the Embodiment factor possesses discriminant validity since AVE is less than MSV, there are minor discriminate validity concerns as the MSV is slightly greater than the AVE for Novelty and the values for MSV and AVE are

Table 5. Experiencing Factor Loadings for the Final Item Pool Exploratory Factor Analysis

Item	Factor (F) loadings		
	F1	F2	F3
Presence			
I was deeply involved	.736		
I was alert and aware	.832		
I actively participated	.931		
My senses were engaged	.708		
I was fully present	.910		
I was in the flow	.817		
My attention was focused	.807		
I felt connected and whole	.610		
I was in the here and now	.671		
I responded to what was happening	.588		
I was not self-conscious	.565		
I didn't notice the passage of time	.456		
Embodiment			
I felt a sense of oneness with the natural world		.857	
I felt the experience in my body		.866	
The experience was emotional		.388	
Novelty			
I saw things in new ways			.977
It was fresh & new			.461
I learned something new			.552

Note. Factor loading below .350 are not displayed. Extraction Method: Maximum Likelihood. Rotation Method: Promax with Kaiser Normalization.

nearly equivalent for Presence. Thus, some of the items under Novelty and Presence may be better explained by another variable. These statistics indicate that all three factors represent the experiencing concept as defined by the Experiencing Scale items and that the Embodiment factor is distinct from the Presence and Novelty factors.

Table 6. Construct Psychometrics from Confirmatory Factor Analysis

	CR	AVE	MSV
Novelty	0.767	0.531	0.564
Presence	0.940	0.568	0.564
Embodiment	0.782	0.549	0.396

Discussion

The above factor analysis results shed some light on the nature of experienc-

ing as viewed from the perspectives of Focusing, Flow, Adsorption, and Mindfulness. They give construct validity for a three-factor model of experiencing. Presence accounted for 47% of the variance while Embodiment accounted for 9% and Novelty accounted for 3%. Average variance extracted (AVE) suggests adequate convergent validity for items in each of the three factors. Discriminant validity between the factors is lacking for Novelty and Presence but seems to distinguish Embodiment. This along with lower average item scores for the three embodiment items (3+) versus 5+ for Presence and Novelty items suggest that embodiment may be a deeper level of experiencing that is slower to engage.

Presence is a significant concept in all four of the experiencing research traditions. The characteristics of the items in the Presence factor well describe the elements of the experiencing process. The concept of Presence refers to the extent to which the learner is actively engaged during the experience. More specifically in relation to education and teaching, Rodgers & Raider-Roth (2006), define presence as "a state of alert awareness, receptivity, and connectedness to the mental, emotional, and physical workings of both the individual and the group in the context of their learning environments" (p. 265). In their view, there is a relational dimension of presence, existing in both the teacher and the learner. When both are fully present, the level of experiencing is deeper.

The second factor, **Embodiment**, refers to a somewhat deeper level of experiencing that is beneath thought and language. The concept of Embodiment refers to the felt-sense one is attuned to during the experience and when present, demonstrates the highest level of experiencing. Embodiment is kinesthetic in the way that the experience is felt and brings the body into participating in the experience. Embodied cognition theorists suggest that such learning experiences where students participate in an immersive, embodied way, results in greater retention of information in the long term (Gelsomini et al, 2020).

The third factor, **Novelty**, is most prominent in Langer's mindfulness theory (Langer, 2000). She argues that one technique of mindful learning is to notice in a situation, things that are new and different from expectations. Novel situations can also serve as a trigger for experiencing, that enables progression to other stages of the experiential learning cycle. Novelty can serve to first get the attention of the learner. While there may be comfort in routine or repetition, novel approaches to ideas or ways to illustrate a concept serves peak interest and curiosity. Learners may vary in terms of the importance they ascribe to newness. The term neophilia is used to describe the love of or enthusiasm for what is new ("Neophilia," n.d.), and the degree to which one thinks of oneself as a neophile can vary (Gallagher, 2012). Novelty has the ability to pique our curiosity and inspire us to learn. So, it is logical to assume that to fully engage in an experience, you must first get the attention of the user and doing something novel is one way to do that.

Educational Applications

There is a crisis in student engagement around the world. For example, "A recent Grattan Institute report suggested that as many as 40% of Australian

students are consistently disengaged in class, and that these students are one to two years behind their peers in academic performance. The report also identified that the majority of disengaged students do not actively disrupt the class, but rather tend to be unmotivated and off-task without attracting the teacher's attention" (Mann, 2018, p. 169). Gross measures of student disengagement such as non-attendance, disruptive behavior and poor performance can be traced in part to a failure to productively engage in the learning process itself. When students feel they are not learning anything from their classes, it is understandable that they would disengage, particularly when other life circumstances bring additional obstacles. In the US, the National Survey on Student Engagement (NSSE) has shown increases in student engagement over its twenty-year history in large part due to the introduction of effective teaching practices that improve student learning such as collaborative learning, reflective learning, quality advising and teacher/student interaction (National Survey of Student Engagement, 2020).

The Experiencing Scale in its entirety (Appendix A) can be a useful tool to gauge student's levels of engagement. Reviewing the scale may be of use to those planning an experiential learning session as a form of a checklist, or of use as a post experience feedback form. By viewing participant's responses to the statements provided, one could interpret dots that favor the statements towards the left side to be in line with the experiencing self. Dots leaning towards the right side may indicate that the participant may be considered less experiencing, or less engaged in learning. Further insight may be gained by looking at the scores of each of the sub-constructs, or factors we identified: Novelty, Presence and Embodiment.

Educators may find it useful to use a shortened form of the scale when immediate feedback is desired. An abbreviated version of the complete scale includes 4 items taken from the Presence factor. (Appendix B) The selected items possess high internal consistency (Cronbach's Alpha .90) and can be used to poll a class immediately following an activity as a quick "temperature check" to determine the way in which participants are engaging and experiencing the learning opportunity. It can also be used as pre-work to set experiencing goals for a learning experience.

Engaging students in learning is proving even more difficult in the transition to online learning. Yet, a number of recent studies are showing that social, cognitive and teacher presence, experiential learning and active participation can increase online engagement in learning (Martin et al., 2018; Dunlap et al., 2016; Krassmann et al., 2019). The 4 item short experiencing scale can be a useful guide and monitoring device to gauge the ongoing level of experiencing in an online session reminding learners to be fully present with focused attention in the here-and now and to participate in the class.

Personal Development Applications

The experiencing scale can also be used as a tool for developing one's own experiencing skills to increase learning and creativity. A person can use the scale to gauge their level of experiencing in different situations in their life. This in-

formation can help the person to deliberately prepare for learning by seeking novelty, being present and attending to embodied feelings and it can also serve as a gauge for on-going monitoring of one's experience in a class or program.

Summary and Conclusion

The Experiencing Scale is a useful measure of the relationship participants have with the material and context of experiential learning and serves as a relevant instrument to gauge a learner's engagement in learning. We have theoretically explained the origin of the Experiencing Scale and the results of its use in a classroom setting. The scale as a whole demonstrated high internal consistency (Cronbach's Alpha .932). Upon analysis of this sample, overall, it was found to be reliable and met convergent validity but did not meet criteria for discriminate validity.

Directions for Future Research

As we noted earlier the Experiencing Scale gauges the transaction between the person and their situation. Both the personal characteristics and situational characteristics should influence a given level of experiencing to some extent. We would hypothesize, for example that people with an Experiencing Learning Style would engage more deeply in experiencing that those with a Thinking Learning Style (Kolb, 2015). When considering the context for learning, one might predict that deeper levels of experiencing would occur in an active, experiential exercise than in a lecture.

Further research is needed to test the scale in different environments. For example, results could be compared when the scale is taken in a classroom versus in a natural, outdoor setting. The method of instruction could also be compared to determine how experiencing may differ when students partake in a lecture versus an experiential simulation or to compare experiencing in an in-person versus online course format. In our sample, data was gathered following various in-person experiential activities. Within this context, we found that activities that were more immersive and highly experiential in nature further support a higher level of experiencing. Future studies could further explore high versus low involvement in experiential learning activities in a more systematic manner. ■

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Appendix A

Experiencing Scale Long Form

Read each of the item pairs on the left and right side. Then, mark the button that best describes your experience.

1	I saw things in new ways	O O O O O O O	My views did not change.
2	It was fresh & new.	O O O O O O O	It was pretty much as I expected.
3	I learned something new.	O O O O O O O	I didn't learn anything new.
4	I was deeply involved.	O O O O O O O	I was uninvolved.
5	I was alert and aware.	O O O O O O O	I was easily distracted.
6	I actively participated.	O O O O O O O	I did not participate.
7	My senses were engaged.	O O O O O O O	My senses were not engaged.
8	I was fully present.	O O O O O O O	I was somewhere else.
9	I was "in the flow."	O O O O O O O	I felt resistant.
10	My attention was focused.	O O O O O O O	My attention wandered.
11	I felt connected and whole.	O O O O O O O	I felt scattered.
12	I was in the here-and-now.	O O O O O O O	I was there-and-then.
13	I responded to what was happening.	O O O O O O O	I was on "automatic pilot."
14	I was not self-conscious.	O O O O O O O	I was self-absorbed.
15	I didn't notice the passage of time.	O O O O O O O	I was aware of time passing.
16	I felt a sense of oneness with the natural world.	O O O O O O O	I did not feel a connection with the natural world.
17	I felt the experience in my body.	O O O O O O O	I had no bodily sensations.
18	The experience was emotional.	O O O O O O O	I had no emotional reactions.

Note to Educator: Items 1 – 3 represent Novelty, 4 – 15 represent Presence, and 16 – 18 represent Embodiment.

Appendix B

Experiencing Scale Short Form

Read each of the item pairs on the left and right side. Then, mark the button that best describes your experience.

I was fully present.	O O O O O O O	I was somewhere else.
My attention was focused.	O O O O O O O	My attention wandered.
I was in the here-and–now.	O O O O O O O	I was there-and-then.
I responded to what was happening.	O O O O O O O	I was on “automatic pilot.”

Building Cultural Competency among Emerging Public Health Professionals: Student Experiences in Panama

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In 2020, the COVID-19 pandemic forever changed the world as we know it, and proved, once again, that public health *is* global health (Fried et al., 2010). Therefore, schools of public health, medicine, and other health professions need to prepare students with the knowledge and skills necessary to address both current and future global health needs. One of the prerequisite skills of effective public health and health practitioners is cultural competency (Fleckman et al., 2015), and previous authors have described study abroad and service-learning as established strategies for enhancing this skill (DeLoach et al., 2018; Kohlbry, 2016).

In summer 2019, the University of Alabama at Birmingham School of Public Health sponsored a six-credit hour study abroad course for undergraduate and graduate students to explore population health in Panama. By design, this travel course afforded students a unique opportunity to view health and health care through a cultural lens. This article describes how students made meaning of their experience through an analysis of student-produced work, including reflective journal entries, blog posts, and photo journaling.

Literature and Conceptual Framework

Across health disciplines, cultural competency has been identified as a critical skill for addressing the health challenges of the 21st century (de Beaumont Foundation, 2015; DeSalvo et al., 2017; Expert Panel, 2012). Cultural competency connotes one's ability to effectively interact with people of diverse backgrounds and different identity groups. In the context of medicine and public health, culturally competent care respects diversity in the patient population and cultural factors that can affect health and healthcare, such as language, communication styles, beliefs, attitudes, and behaviors (AHRQ, 2014). The Association of American Medical Colleges and Association of Schools of Public Health (Expert Panel, 2012) noted that culturally compe-

tent care and services improves both their delivery and relevance to diverse populations, thus improving health outcomes and reducing health disparities.

Experiential Education

One evidence-based strategy for enhancing cultural competency in the health professions is experiential education (Cahn & Smaller, 2020). Experiential education is an educational philosophy that describes out-of-classroom learning opportunities that incorporate (a) reflection, critical analysis, and synthesis of the learning experience; (b) student accountability for learning; (c) active engagement; (d) deeper understanding of self and self in relationship to others; and (e) opportunities for growth through natural consequences, mistakes, and successes (AEE, n.d., para. 3). The Panama trip combined two specific forms of experiential learning: study abroad and service-learning.

Study Abroad

Study abroad is generally defined as an academically-grounded, university-related program of study that takes place in a foreign location. For the purpose of this investigation, study abroad signified a location outside the boundaries of the United States. Study abroad is considered a high-impact educational practice that promotes international awareness; intercultural competence; and student gains in cognitive, intrapersonal, and interpersonal domains (DeLoach et al., 2018; Engberg, 2013; Pipitone, 2018).

Some have argued that 'more is better' in terms of duration and depth of the study abroad experience (DeLoach et al., 2018; Dwyer, 2004). Others, however, have suggested that academic rigor and the use of intentional, experiential pedagogies (e.g., service-learning, reflecting writing, pre-trip learning), rather than program length, are largely responsible for student outcomes (Antonakoupoulou, 2013; Nguyen, 2017; Tarrant et al., 2014). Pipitone (2018) stated, "effective short-term programs create culturally immersive and focused learning environments through intentional program structure and pedagogy" (p. 57).

Service-learning

Seifer and Connor (2017) defined service-learning as a "teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities" (p. 4). Best practices for service-learning suggest that the experience (a) responds to community-identified concerns, (b) balances service with learning, (c) is mutually beneficial, (d) enhances the curriculum by extending learning beyond the classroom, (e) applies lessons learned in real-world situations, and (f) provides opportunities for critical reflection (Comeau et al., 2018).

Parker and Altman Dautoff (2007) argued that study abroad and service-learning strategies can complement one another and produce learning and teaching synergies. Kohlbry (2016) observed that international service-learning experiences fostered cultural competence among nursing students, and Lichtveld (2016) stated, "Public health professionals, especially those who benefited from study abroad programs during their education, seek to practice in lower- and middle-income countries where they hope to address dire health needs and make a greater difference" (p. 511).

Pre-departure Learning

Prior to departure, students met with faculty and staff to review course expectations and student responsibilities and to discuss relevant public health topics. Instructors assigned several readings from the book *Healthier: Fifty Thoughts on the Foundations of Population Health*, which focused on the aspirations and strategies of public health, social justice, the culture of health, intergenerational health, and the relationship between income and health. After completing these readings, students worked together to co-construct shared definitions of core themes that would play a central role in their learning. Consensus definitions are available in Figure 1.

To embed these terms in the collective learning experience of students, instructors scheduled pre-departure, on-site presentations to explore historical connections between Birmingham, Alabama and Panama, as well as population health issues regarding infectious disease management (e.g., HIV/AIDS), vector control, and environmental health. Additionally, students researched and presented information on the history and culture of Panama, including indigenous populations, health status indicators, and the health care system in Panama. These presentations were necessary since students had little prior knowledge of Panama before the trip.

Finally, instructors delivered a presentation on the role of culture, listing aspects of culture and drawing specific attention to the differences between individualist and collectivist cultures. This presentation provided a framework for understanding that (a) all societies are shaped by culture, including the United States, (b) cultures are equally valid, and (c) we can critically assess the positive and negative functions of any culture.

Methodology

For this investigation, our team conducted secondary data analysis of student-produced work, including reflective journal entries, blog posts, and photo journaling. Based on the highly structured nature of this course, we used deductive coding to guide thematic analysis. Data were organized in a text-to-table application in Microsoft Word and coded using the procedures outlined by Ivankova (2015). Authors verified all themes and sub-themes and discussed disagreements until consensus was reached. Consistent with best practices in qualitative methodology, we used multiple methods of verification to ensure trustworthiness of the data, including peer debriefing, internal memoing, and triangulation of data sources (Birks et al., 2008; Nowell et al., 2017). Finally, we used reflexivity to clarify our own values, beliefs, and assumptions (Dodgson, 2019). This project was reviewed by the

Terms	Definitions
Population health	The collective well-being of a community
Health equity	Improve access and minimize inequities through innovative strategies
Social Determinants of Health	Internal and external factors that influence health outcomes

Figure 1.Terms and Definitions. Definitions were based on student consensus of terms.

University of Alabama at Birmingham Institutional Review Board and classified as quality improvement for course design.

Participants

Thirteen students participated in this travel course. The course was available to students at all degree levels and academic disciplines. The composition of the sample included the following: Undergraduate students (6), Master's level students (6), and Doctoral level students (1). Students represented the following majors and/or concentrations: General Public Health (5), Health Behavior (2), Epidemiology (1), Health Education/Promotion (1), Biology (1), MPH/MPA (1), MPH/MD (1), and Global Health Certificate (1). Of the 13 students, nine self-identified as White, non-Hispanic; four Black, non-Hispanic; one Asian/Pacific Islander; and one Multicultural. Only one self-identified as male. Due to the small number of participants, the team assigned pseudonyms to participants to ensure confidentiality. Under the Common Rule, this project was classified as quality improvement for course design.

Setting

Panama is a country located in Central America; it is bordered by Costa Rica to the north and Columbia to the south. Panama serves as a natural *land bridge* that connects North and South America. Panama has a total population of approximately 4.1 million, and more than half of Panama's residents live in the Panama City-Colón metropolitan area. The primary language is Spanish, although different languages are spoken among its indigenous populations, and the vast majority of Panamanians (85%) are Roman Catholic. One of the most prominent features of Panama is the Panama Canal, which connects the Atlantic and Pacific Oceans and serves as a strategic trade route.

Findings

Based on a review of student-produced work, our team noted that population health issues, such as health priorities and access to care, were frequently influenced by social determinants of health as well as characteristics of Panamanian culture (e.g., history, religious beliefs, social habits). Additionally, through service-learning activities, students discovered the dynamic ways in which culture can influence individual and community health practices. We derived three overall themes based on deductive analysis: (a) population health, (b) barriers to health access, and (c) cultural practices to promote health behaviors. For each theme, we provide context and representative quotes.

Population Health

Vaccinations as a National Health Priority

Prior to departure, students learned about the economic impact of the Panama Canal as well as its historical significance regarding national health policies. Students documented the heavy toll of lives lost during construction of the Panama Canal due to yellow fever and malaria, and noted that Dr. Gorgas and other physicians with ties to Alabama were sent to Panama to establish vector control, storm water runoff, and sanitation systems to protect against these highly transmissible infectious diseases.

While in Panama, students observed how these early and successful efforts with disease epidemiology "defined the culture for the acceptance of vaccina-

tions for the country." At the Chitré Health Center, a Ministry of Health facility focused on prevention, Makayla stated, "We were impressed to learn that they (clinic staff) immunize 95% of people (in their community), which they believe is their greatest method to preventing mortality and morbidity. They even travel *to* people to ensure that everyone is getting the vaccinations they need." Moreover, this high vaccination rate extended to the HPV vaccine, which students noted has struggled to gain traction in the United States. Throughout the experience, students heard a common refrain from health officials: "It is less expensive to vaccinate than to deal with an epidemic."

Environmental Concerns

Water and sanitation. Despite progressive policies on disease control, students detected water and sanitation issues in rural and underserved areas of Panama. Recalling a pre-trip presentation on environmental health, students described how the hydrologic cycle, or the continuous movement of water, can help safeguard water, sanitation, and food. According to Nora, "if water is contaminated in the cycle, it will flow to our supply of (drinking) water which in turn can cause illnesses to the community, including livestock and wildlife."

In Chitré, Cole described a landfill that was adjacent to an elementary school: "They (residents) just take all of the trash and dump it in a residential area. There were a lot of livestock around, essentially sitting in the trash." Zoe added, "The animals eat the trash… and the trash contaminates the river, which people use for subsistence fishing." Considering Panama's stance on preventable diseases, students seemed troubled by this disruption in the hydrologic process. Nevertheless, they recognized that clean water and sanitation remains problematic for the poor and underserved in all parts of the world.

Vector control. Panama's tropical atmosphere contributes significantly to vector-borne diseases like dengue fever and chikungunya. In coordination with the Ministry of Health in Las Mañanitas, students accompanied Environmentalists to scan for conditions that contribute to disease spread. Zoe observed, "Three times a year, they (Environmentalists) go the residencies of everyone in the community and look for standing water, because that is the breeding grounds for vectors."

Students stated that the Environmentalists not only eliminated the standing water but took time to explain to residents how mosquitoes can harm people when they breed and carry diseases. Notwithstanding these "small wins", students noted that efforts to mitigate vector-borne diseases were severely limited due to understaffing. Currently, there are only four Environmentalists in Las Mañanitas who serve a community of 60,000 residents.

Barriers to Health Equity

Three-tier system of care

According to students, access to health care in Panama is divided by class and socioeconomic status. The Ministry of Health primarily serves the poor and indigenous populations while the Social Security Fund serves the working class who pay into the system. Middle and upper class citizens, approximately 10% of the population, receive services from the

private health care system. Student photographs of facilities clearly demonstrated resource disparities between social classes; students noted that top-of-the-line medical facilities are only available to individuals who can pay for them.

While in Panama, students visited multiple Ministry of Health clinics that offer a wide range of services. The clinic in Las Mañanitas, for example, provides primarily preventative health care. The clinic has a limited number of health providers, and lines to see a doctor usually start at 5:00 a.m. Stella stated: Basically this one clinic and health care team serves those that are retired but do not have a pension, those that don´t work, (and) any and all who do not have the means to pay for other health services offered by the government.In addition to the size of the community, Stella described challenges to serving the community's differing health needs including "a diversity of customs, hygiene habits, and (health) behaviors according to each group's cultural, historic and geographic backgrounds."

Stigma

In Panama City, students toured Hospital Santo Tomás, which provides comprehensive services to the country's most vulnerable patients. While there, students met with an infectious disease specialist who discussed the HIV/AIDS epidemic in Panama. The speaker noted that the number of individuals who are infected with HIV is high, but those who are diagnosed, in treatment, and virally suppressed is low.

Due to religious beliefs and cultural norms, stigma related to HIV/AIDS is extremely prevalent in Panama. Paisley observed: "People who come in to get tested do not come in until the patient's condition has progressed to AIDS in its late stages. They (patients) are often very symptomatic and very ill. This is part of why the mortality rates remain so high." According to Gabriella, limited STI test, abstinence only education, and lack of pre-exposure prophylaxis (PrEP) further exacerbates the situation.

Proximity and cultural beliefs

There are seven indigenous tribes in Panama that represent 13% of the overall population. These individuals live in rural and mountainous regions of the country, which makes access to clinics and healthcare facilities difficult. Moreover, the vast majority of indigenous people live in extreme poverty. While visiting the Emberá tribe, Caroline noted that transportation and language were both potential barriers to healthcare. According to the chief, healthcare providers in the tribe include a shaman, herbalist, and midwife. The nearest hospital is at least an hour away, and the Emberá tribe's primary mode of transportation is canoe.

Quoting the chief, Caroline wrote: "someone who becomes incredibly ill may present in the ED (Emergency Department) of Santo Tomás not only with their condition, but face language or terminology barriers in trying to explain the condition," since Spanish is not their native language. Additionally, students learned that the Emberá people refer to unknown diseases simply as "cancer", which can further delay care. Caroline concluded: "This visit (to the Emberá tribe) really challenged to me to think about where the lines of culture and medicine should cross…I have no immediate answers, but the seed has definitely

been planted to use as a frame of reference when I encounter new cultures and viewpoints both domestic and abroad."

Cultural Practices to Promote Health Behaviors

Based on input from community partners, students engaged in service-learning with two elementary schools and one adult care facility. Health topics included oral hygiene and handwashing for kindergarten and first graders, vector control for fourth graders, and physical activity for the elderly. In the schools, students used songs and games to reinforce instructional demonstrations about healthy behaviors.

Dancing

For their service-learning activity with elderly adults, students prepared low-impact exercises that individuals could engage in from a seated position. Students were informed prior to the trip that they would be working with older patients in a waiting room area. In reality, students discovered a group of vibrant women between the ages of 70 and 85 who were meeting in a large community center. Based on this new information, students asked the women what exercises they liked to do, to which they responded, "Walking…and DANCING!"

Students plugged in a portable speaker and led the whole group through several popular dances including the Cha Cha Slide and the Macarena. One of the women in the group said, "We want to teach you our (Panamanian) dances." Mila remarked, "Everyone was dancing, laughing, interacting, and being physically active. Language barriers deteriorated and everyone was enjoying themselves… Both groups benefitted from a morning of bonding across cultures through music and movement."

Discussion

In summer 2019, 13 undergraduate and graduate students participated in a four-week travel course to explore the complex and interrelated concepts of population health, health equity, and social determinants of health. Through observations and field experiences, students had a unique opportunity to see how historical developments, societal expectations, and cultural beliefs shaped individual health behaviors, and to begin to understand a system of care that is both similar and different from their own. Interactions with health officials and community members encouraged students to challenge their own biases and assumptions, which is a first step towards developing cultural competency (Shepherd et al., 2019)

Through visits to clinics and health facilities as well as service-learning activities, students identified strengths and challenges to health and healthcare in Panama. Students described Panama's vaccination program as a national asset and suggested that a similar commitment to community health in the United States would strengthen the overall system of healthcare. Students also had multiple opportunities to observe and participate in the rich cultural life of Panama through dance, noting that dancing strengthens community bonds while simultaneously yielding positive health benefits to individuals.

Not surprisingly, students encountered conditions in Panama that undermined healthy living, such as water contamination and vector-borne

diseases as well as barriers to health access based on socioeconomic status, religious and cultural beliefs, and proximity. Students acknowledged the difficulties in addressing these types of systemic issues yet expressed the belief that clean water, sanitation, and access to healthcare are basic human rights. Therefore, even as students wrestled with notions of equity and fairness, they solidified their professional commitments to caring for the poor and underserved both domestically and abroad.

Despite the short duration of this travel course, instructors used intentional pre-trip activities and readings as well as daily reflective essays to scaffold student learning (Coulson & Harvey, 2013). Learning activities were designed to provide both structure and flexibility to engage students in purposeful and active learning (Pipitone, 2018), and students' active engagement in developing shared definitions of core concepts prior to the trip gave them greater ownership and commitment of their learning, which allowed them to more easily recognize these concepts while in Panama.

Reflective writing assignments provided students an outlet to record their observations of external expressions of culture (i.e., customs, rituals, styles) and internal expressions of culture (i.e., attitudes, habits, norms) and to discuss their relevance in terms of health behaviors (McAuliffe, 2013). This level of deep reflection compelled students to engage more fully in their own learning experience.

Limitations

While this qualitative investigation provides useful contextual data from undergraduate and graduate students who participated in an international study abroad program, it is not without limitations. Findings were based on the perceptions of a small yet purposeful set of students who participated in a four-week travel course; therefore, results cannot be generalized beyond program participants. Additionally, this course occurred prior to COVID-19, which undoubtedly placed additional pressure on an already under-resourced healthcare system. Attitudes and behaviors of Panamanians regarding health and health systems may have changed dramatically since the pandemic due to shifts in healthcare priorities. Finally, this investigation did not capture the perspectives of instructors, community partners, health providers, or other key stakeholders, which represents a logical next step for future research.

Implications for Practice

This travel course broadened students' worldviews and allowed them to explore health behaviors and healthcare delivery through a cultural lens. Students observed health challenges that were contextually unique (e.g., canoes as primary vehicle, indigenous dialect) but which spoke to larger issue of health access (e.g., transportation, language). Moreover, they discerned how cultural norms and beliefs as well as social determinants of health contributed to health behaviors. As documented in the research literature, developing a greater understanding of cultural factors that affect health can reduce disparities in healthcare and improve patient outcomes (Betancourt & Green, 2010; Henderson et al., 2018).

Debriefing and journaling provided students a structured way to reflect on their own cultural values (i.e., reflective

awareness) and process their reactions to different cultural settings. Furthermore, students engaged in an intensive debrief once they returned to the United States and delivered a presentation for others to solidify their learning and demonstrate their cultural competency. Finally, course activities challenged students to consider the day-to-day experiences of healthcare providers in lower- and middle-income countries and gauge their interest in working under such conditions (Lichtveld, 2016).

Faculty interested in establishing an international study abroad program with a service-learning component should work closely with institutional offices of experiential education, study abroad, and/or service-learning to take advantage of their knowledge and expertise. Faculty may also benefit from a review of peer-reviewed literature regarding best practices for designing highly structured, short-term study abroad courses (e.g., Donnelly-Smith, 2009; Rohort & Fisher, 2013). If the country of interest is new to the institution, it may also be worthwhile for faculty to reach out to other institutions that have established relationships with local officials and community leaders. In Panama, these individuals served as *cultural brokers* for the country; the opportunities they negotiated provided both depth and authenticity to the learning experience.

Conclusion

Effective healthcare and preventive measures requires culturally competent public health and healthcare providers. Cultural competency, however, requires a deep and profound understanding of individuals who are shaped by different life experiences than one's own. We suggest that cultural competency can be strengthened through immersive opportunities, like the one students experienced in Panama. Interactions with providers and community members in Panama encouraged students to think beyond their own experiences of public health and healthcare and consider the experiences of others.

Study abroad and service-learning activities proved to be valuable strategies for promoting student learning in the areas of population health, health equity, and social determinants of health. Through reflective writings, blogs, and photos, the travel course encouraged students to explore healthcare and health behaviors based on history, beliefs, customs, and traditions. Moreover, it challenged students to reflect on their own biases and assumptions and commit to standards of professional integrity as emerging public health and health practitioners. ■

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Entrepreneurship Education and Experiential Learning in Higher Education

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Entrepreneurship education (EE) programs in higher education have grown globally since 1947 when Harvard Business School offered the first entrepreneurship course (Kuratko, 2005; Nabi et al., 2017; Solomon, 2007). The growth is due to the increased recognition of university-based EE programs as well as the reinforcement of a set of potential entrepreneurial outcomes by higher education institutions (HEIs) (Nabi & Liñan, 2011, Nabi et al., 2017; Rideout & Gray, 2013) as they relate to industry needs. For instance, increasing students' knowledge, skills in venture creation and attitudes (Greene & Saridakis, 2008, Nabi et al., 2017), and overall job creation eventually contribute to economic growth and development (Bosma et al., 2008; Nabi & Liñan, 2011; Nabi et al., 2017). Global trends in the form of innovations, cultural value, and political expectations reinforce the demand for a focus of EE around the world. EE as a topic (Canziani et al., 2015; Ghobril et al., 2020; Gibb, 2011; Mandel & Noyes, 2016; Mwasalwiba 2010; Nabi et al., 2017; Sirelkhatim & Gangi, 2015) has gained traction and interest from the academic community.

The purpose of this exploratory qualitative study is to share five selected entrepreneurship project course examples at Southern New Hampshire University (SNHU) applying Kolb's experiential learning theory (Canziani et al., 2015; Kolb, 1984: Kolb & Kolb, 2017; Miettinen, 2000; Pittaway & Cope, 2007). The common instructional theme objectives presented include the learning environment, client interaction, course impact, reflection, student engagement, and subject matter expertise. The paper is organized in a literature review section dedicated to main theories of experiential learning (EL) and EE and some background information on the entrepreneurial landscape of New Hampshire (NH) and SNHU. The research scope and methodology section include specific course and project examples at SNHU. The key findings are presented using Kolb's experiential learning theory in the discussion section, and the final section includes a conclusion on the implication of findings and future steps.

Literature Review

Experiential Learning

The concept of EL -although based on many different theories- was inspired by

John Dewey in the quest to define the "theory of experience" (Kolb & Kolb, 2017, pp. 10). According to Dewey, the best way of learning is the combination of reflective thought and action of the learners (Miettinen, 2000). Canziani et al. (2015) particularly highlighted the influence of Dewey who incorporated experiential learning into traditional educational models and Kolb for developing the experiential learning theory, which became particularly popular. According to Kolb's theory, "learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38). The theory addresses a cyclical model of learning through the four stages of doing, observing, thinking, and planning (see Figure 1) to facilitate the learning process (Kolb, 1984). Each stage supports and builds on the overall experience and learnings. The doing stage, referred to as *concrete experience,* is the moment when the learner is participating and experiencing the activity in the field or lab setting, and in general outside the classroom (Healey & Jenkins, 2007). The observing stage is also known as *reflective observation* during which the learner reflects on his/her experience (Healey & Jenkins, 2007). During the thinking stage, referred to as *abstract conceptualization*, the learner presents a model or theory of what is to be observed (Healey & Jenkins, 2007). Finally, in the planning stage, known as *active experimentation,* the learner plans to study a model or theory as it relates to an experience (Healey & Jenkins, 2007).

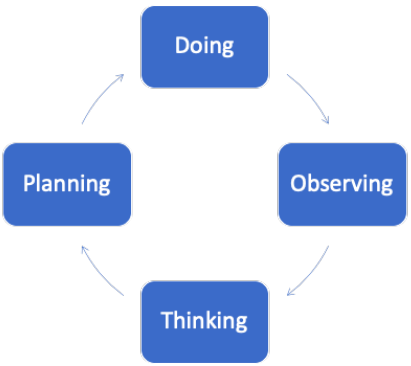

Figure 1. Kolb's Experiential Learning Theory Cycle. Note. This figure was originally based on Jenkins (1998) and reproduced by Healey & Jenkins (2000).

The benefits of the experiential learning model are inevitable for both students and teachers. From the students' perspective, the learnings accumulated are multifaceted. These learnings include but are not limited to the following:

- increased critical thinking and ability to make connections between theory and practice (Kolb & Kolb, 2017)
- opportunities to be more active than passive with their learning (Canziani et al., 2015)
- opportunities to receive immediate feedback, participate in group discussions, and experience teamwork towards a common goal (Meyers & Jones, 1993), and
- real-life experiences (Losapio & Koustas, 2017; Pittaway & Cope, 2007)

From a teacher's perspective, a reflective approach towards work models habits that will lead to continuous improvement, development of teaching skills, and awareness of different learning styles (Sharlanova, 2004). Besides identifying benefits for the learners and

teachers, the value of EL is obvious in both general education and particularly EE (Mandel & Noyes, 2016). However, there is minimal knowledge in the variety and abundance of experiential programs and courses offered in entrepreneurship at higher educational levels, as well as insights regarding the obstacles to launch such programs and courses or suggested solutions (Mandel & Noyes, 2016).

Entrepreneurship Education

EE can be delivered in many ways depending on the purpose of the course and the learning outcomes (Sirelkhatim & Gangi, 2015). Some programs include traditional teaching approaches, while other opt for experiential and active learning to enhance the student's understanding of entrepreneurship (Canziani et al., 2015). Although there is limited literature on practices and programs specifically focused on EL in EE, several institutions have shifted to delivering their entrepreneurship programs in specially designed environments, using learning outcomes that are action specific, and most importantly creating experiences for the learner (Mandel & Noyes, 2016). According to Gibb (2002, 2011; as cited in Mandel and Noyes, 2016, p. 166) these experiential approaches require learners to embrace an entrepreneurial "way of life" by developing specific skills, behaviors, attributes, and cultivate an "entrepreneurial mindset".

As EE becomes a more popular research topic (Mwasalwiba, 2010; Solomon, 2007), the distinction between the different delivery approaches become more apparent due to the entrepreneurship program objectives (Sirelkhatim & Gangi, 2015). According to Sirelkhatim and Gangi (2015), EE can be organized into three instructional themes of teaching *about*, *for*, or *through* entrepreneurship (see Appendix B). Each theme offers a particular purpose, unique learning objectives, specific teaching methodology, and different student engagement levels. The themes of teaching *for* and *through* entrepreneurship are built on the EL concepts of learning by doing and active student engagement. The main difference between these themes is when learning *for* entrepreneurship the student simulates being an entrepreneur whereas learning *through* entrepreneurship the student is an actual entrepreneur. Most researchers suggest that teaching *through* entrepreneurship is the best practice for EE.

EE activities allow for opportunities of engagement with mentors, customers, suppliers, and the team, as well as reflection and the exploration of other entrepreneurial opportunities (Mandel & Noyes, 2015). Measuring the impact of the activities can be challenging but possible. Assessing the impact on learners can be captured by administering a pre- and post-project survey on entrepreneurial behavior, entrepreneurial intent, knowledge, inspiration, and resources (Ahmed et al., 2020). At the institutional level, the impact of EE can be assessed by alumni engagement and financial support in entrepreneurship projects (Ghobril et al., 2020). The faculty is impacted by the significant shift of role they may experience and the potential systems in place to support or not support their work (Arellano & Jones, 2018). At the community level, impact indicators include the number and types of start-ups, the survival of these start-ups, and their contribution to society and the economy (Nabi et al., 2017).

Entrepreneurial Landscape at the State of New Hampshire (NH)

The entrepreneurial landscape in NH has certainly changed over the years. In 2019, the national average rate of new entrepreneurs for each month was 0.31% with NH comparing at 0.28% (Kauffman Indicators of Entrepreneurship, 2020). As of 2020, according to the U.S. Small Business Administration Office of Advocacy, NH has 136,535 small businesses employing a total of 300,628 people (U.S. Small Business Administration Office of Advocacy, 2020). Overall, several HEIs in NH offer studies in entrepreneurship, entrepreneurial studies, or small business management and have active Centers for Entrepreneurship. Several entrepreneurship hubs have opened in the greater NH area (due to the easy access to the metro Boston area) and focus on software, biotechnology, and medical technology (Pilkey, 2019). The current NH entrepreneurial landscape is strengthened by meetups, networking events, start-up competitions, accelerators, incubators, hubs, co-working spaces, makerspaces, angel/VC groups, and training and development programs targeted to support business activity for all entrepreneurs, including minorities, immigrants, and women (Pilkey, 2019).

Entrepreneurial Landscape at Southern New Hampshire University (SNHU)

Southern New Hampshire University is a private non-profit HEI located in Manchester, NH (USA). The institution was founded in 1932 as the New Hampshire Accounting and Secretarial School and later renamed to New Hampshire College in the 1960s. The continued growth of the school reached its peak in 1999 with the new online program and changed its name to SNHU in 2001. The institution is continuously growing and currently has over 250 programs and 135,000 students (the majority of students are online).

SNHU offers innovative and practical experiences for its students and embraces EE in multiple ways. Such examples include the Coming of Age call for proposals to increase EL opportunities supporting field trips, service-learning projects, study abroad, internships, and community-based research and project experiences. In 2018, campus leadership approved the creation of the Experiential Education subcommittee with focus on the continued support of experiential initiatives, fostering a culture of EL, promoting experiential education as a primary advantage for students attending SNHU, and advocating the intentional embodiment of experiential practices in a holistic manner throughout every students' academic journey (SNHU Experiential Education Proposal, 2018). Since the summer of 2020, in the midst of the COVID-19 pandemic, SNHU's faculty and staff participated in the reimagination of the learner experience with the implementation of several new innovative experiential programs. The institution's success record with courses, project experiences, and new programs has led to the creation of the Learner Engagement Academic Innovation team (May 2021) also focused on improving and supporting EE practices. As of Fall 2021, the experiential Entrepreneurship degree program (BS. ENT) will launch at the university campus based on the team-based experiential academic model (t.e.a.m.) focusing on team learning, learning by doing, competency-based education (CBE),

coaching, badging, and other innovative tools (Entrepreneurship BS, 2021).

Research Scope and Methodology

The purpose of this exploratory qualitative study was to provide an overarching understanding of experiential EE examples at SNHU. The sample population (five professors and an administrator) instructed courses related to entrepreneurship and delivered the course learning outcomes in an experiential environment.

The semi-structured interviews were conducted from May – June 2020. The research objectives aimed to (1) compile best entrepreneurial education teaching practices at SNHU, and (2) collect information on how instructors measure student engagement, course/project impact, reflection, and assessment practices. All questions were open-ended and focused on the instructor's personal inspiration, experience in entrepreneurship, an overview of the course, the project, the challenges, best practices, impact, student engagement, reflection, and assessment of practices (Appendix A). Using a purposive convenience sampling technique, a total of five courses were identified as experiential EE examples with a sample of 6 participants (one course had two professors). Being aware of the COVID-19 restrictions, participants had the option of being interviewed through a virtual platform (over RingCentral) or responding to the questions via email. All participants were asked the same questions. The data were analyzed using a narrative analysis approach with a focus on the content shared by each participant separately. All findings are presented in the Discussion section.

Munchiez Food Truck

The *Munchiez* food truck is operated by students in a Small Business Management (SBM) course in which they explore issues and challenges involved in starting and operating a successful small business. Students that successfully pass the SBM course are invited to continue in a management role for a specific department by enrolling in the Management Applications course. During this semester-long course, students from both courses are assigned to a department (sales & marketing, human resources and special events, operations, research & development, and finance).

Dr. Susan Losapio, professor and faculty champion for the course, has been instructing the SBM course since its inception. The SBM course was created by three seniors who pitched the *Munchiez* Food Truck idea to the SNHU President as part of a business plan preparation course. The pitch was successful and received the necessary funds to launch the business initiative in the form of a course. The greatest challenge has been the transfer of knowledge from one semester to the next. This issue was partially resolved by creating a Management Applications course which runs in parallel for students interested in learning to become managers and/or general managers of the food truck. The greatest opportunity has been that students experience interconnectivity of the departments and leave the course understanding the importance of breaking down silos, collaboration across departments, team-buildings, and constant communication.

Student engagement in the course was measured by having the stu-

dent-managers conduct two performance appraisals (mid and end of semester). Reflection papers, conversations, and feedback from peers, managers and the professor were also ways to measure student engagement. The impact of the course was measured by the achievement of the learning outcomes, generated profits over the semester, problem-solving confidence in the team, and participation in community events.

Cooperative Development for the Local Enterprise Assistance Fund (LEAF)

The *LEAF and Cooperative Development* course focused on the triple bottom line, understanding the cooperative business model, income equality, and entrepreneurship. The semester-long course work included research, surveying, and the development of financial projections to help launch two new cooperatives in the Greater Boston market.

Dawn Cerrato, an entrepreneur and expert in cooperative models instructed the course bringing in her 20 years of knowledge in the areas of HR, talent management and development, marketing, communications, and member engagement. Some of the greatest course challenges included getting the students to select their best recommendation to move forward as well as the limited market information available on composting and hydroponic farming. The learning opportunities during the course included students gaining knowledge in business development, improving critical thinking, using financial programs, tools, and technologies (Statista, Excel, IBIS World, Survey Monkey, etc.).

Student engagement was measured by the quality work of the individual and teamwork, the depth of the analysis, the questions asked during the process, and the group progress. Besides presenting the research to the client, the students reflected on the project and class experience. The impact of the project/course was measured by the achievement level of the learning outcomes and project sponsor feedback.

Inkwell Interactive Studio

The *Inkwell Studio* was inspired and designed by faculty with industry experience and involved in the game development programs at SNHU to better support the transition of graduates into industry work. Students gain industry experience in a classroom and working in a project-based environment. Inkwell Interactive is a set of two three-credit courses that are taken concurrently. Students complete contracted projects for external clients.

Knowing the client and projects in advance, Professors David Carrigg and Ed Brillant determine in advance the learning outcomes that a student developer could accomplish. The students have the freedom of exploration on how to deliver the project. One of the challenges is for students to understand that the learning setting is different, and content is discovered organically. Success in Inkwell Interactive is defined by the work created and not the grade achieved. The greatest opportunity is that students develop practical skills and discover new skills (for example: working in a team, working under pressure with a client, receiving and interpreting feedback, etc.).

In this course, engagement is not measured in a specific way because stu-

dents need to be present and active. Measuring the impact of the courses has been a challenge. Reflection on the experience is gathered by students presenting their work followed by a large group discussion to critique the work itself as well as the development process, and additional reflection sessions on their work and the course. Traditional course assessment and especially the two additional feedback sessions with the professors have assisted in changing and developing the studio experience during the semesters.

Business Across Borders

The *Business Across Borders* project was part of an International Management course in collaboration with SNHU's Global Education Movement (GEM), an educational project targeted for individuals living in refugee camps. Project activities included a pop-up store to sell the products of eight global entrepreneurs and a fundraiser dinner to increase awareness of the GEM program. The goal of the project was to provide insights and learnings on international business activities.

Dr. Charlotte Broaden, an international business professor, has been teaching entrepreneurship courses for two decades and is a proponent of active student engagement in the classroom. The greatest challenges were the design and implementation of an inventory system to account for all sales by entrepreneur and cross-team communication. The opportunities that emerged from this course included learning more about the entrepreneurs, developing business operations at an international level, planning an event (gala, pop-up store), managing a project (planning, organizing, executing, etc.), assessing team skills, meeting with subject matter experts, and gaining awareness of SNHU's international initiatives.

During the project, a pre- and post-skills assessment, and training session on the use of a project management tool were conducted to assist in the project. Student engagement was measured by letting the teams be responsible for all major task assignments. If a team had completed their tasks, then the members would be required to assist other teams. The impact of the project was measured by meeting financial, marketing, and project goals. At the end of the project, as a final deliverable, the students wrote a reflection on their involvement and its impact on the success or failure of the project as it related to the previously mentioned goals.

The Fashion and Retro Room

The *Fashion and Retro Room* course initially launched as a pop-up store and with the support of the Dean's office was later turned into a store with a permanent space. This project was designed for students enrolled in the Degree in Three (completion of a Bachelor's in Business Administration over the course of three years). Through the project/course students learned to negotiate with vendors, create a business, conduct market research, identify the best location, project, assess sales, and train in display decoration.

Dr. Eklou Amendah, a marketing professor with legal background studies, approached instruction by engaging students in projects inside and outside of the classroom. The course challenges emerged from the students themselves and the physical ability to complete the tasks at hand. The greatest opportuni-

ty from this course was the assessment and the validation of the teaching methodology when students communicate post-graduation with Dr. Amendah to share how the course learnings, skills gained, technologies, and training have helped them find employment in fashion.

Student engagement was measured by encouraging the students to take the lead. Dr. Amendah gradually removed himself and observed the students plan the project, create a team, select a theme, communicate with vendors, prepare space for opening interact, etc. Assessment is a major element in the project with a constant reflection of how students are learning effectively. The impact of the project/course was measured mostly by observing student performance for every single learning outcome (market research, merchandise selection, vendor interaction, store design, etc.).

Discussion

This discussion is organized using Kolb's experiential learning stages. Kolb's model describes a learning cycle of four stages that demonstrate how concepts are interpreted into experience through reflection. Each stage is unique and important for the learner to make connections. The SNHU examples presented above have a common theme of *learning by doing*. The authors' assumption is that the design may have not been intentional to reflect on Kolb's stages (as depicted earlier in Figure 1) but certainly includes all main elements of doing, observing, thinking, and planning (Kolb, 1984) as mapped to the courses in Table 1 below.

In the first stage of *doing* (concrete experience), the learner experiences and engages with the activity outside of the classroom. The courses mentioned above were set in different environments such as in the examples of the food truck (Munchiez), studio (Inkwell), boutique shop (Retro Room), venue (Business Across Borders Gala), and a company setting (cooperatives).

During the second stage of *observing* (reflective observation), the learner focuses on personal reflection. Popular reflection methods in the examples mentioned above were the submission of a reflection paper or a planned discussion (once or twice a semester), and as a follow up conversation, feedback from peers, clients, or the professor.

In the third stage of *thinking* (abstract conceptualization), the learner presents a model or theory to be observed. During this stage, the learners practically used the team and group development model (Natvig & Stark, 2016) to better work in their teams and departments to accomplish their tasks and goals. Additionally, the learners used Locke and Latham's goal-setting theory (Locke & Latham, 2002) to visualize, plan, and execute their respective projects.

In the fourth and last stage of *planning* (active experimentation), the learner is expected "to study a model or theory as it relates to an experience" (Kolb, 1984). During this stage, the learners tested the functions of management (Dolechek et al., 2019) by planning the project, organizing the tasks or themselves into teams, leading, and controlling each respective project by measuring the overall impact.

Reflecting on the EE instructional themes (Sirelkhatim & Gangi, 2015), the instructors in all the courses taught *for* entrepreneurship in practical-based en-

vironments, by teaching techniques for teamwork, starting a business, planning, identifying opportunities, product distribution, and networking (Fayolle & Gailly, 2013; Piperopoulos & Dimov, 2014, Sirelkhatim & Gangi, 2015). The *learning by doing* methodology for all course examples included business model simulations, consulting opportunities, project monitoring, and client networking.

Conclusion

The five selected entrepreneurship course examples mentioned above showcase the application of Kolb's Experiential Learning Theory (Canziani et al., 2015; Kolb, 1984: Kolb & Kolb, 2017; Miettinen, 2000; Pittaway & Cope, 2007). The *learning by doing* methodology observed to deliver experiences is a characteristic in the learning *for* entrepreneurship instructional theme. These instructional theme objectives include: (a) environment (experiences are mostly delivered outside the classroom), (b) real-life projects and/or clients, (c) reflection (as an integral part of the learning process), (d) active student engagement, and (e) subject matter expertise (all instructors had industry experience).

As HEIs design undergraduate and graduate programs in entrepreneurship, it is essential that the instructional themes (about/for/through) are distinguished and supported by respective learning outcomes. Additionally, the selection and the role of the faculty member - as a subject matter expert with industry experience – can add value to the learner experience, inspire entrepreneurial activity, and further support the economic growth of their communities. Further assessment of teaching practices and content can be designed and integrated in collaboration with student learning (Salem & Frank, 2018) and subject matter experts (Tenenberg, 2010) to assist in the continuous development of the course experience.

Further research opportunities in EE can include a study on courses and projects at other HEIs (local, national, global) with a focus on entrepreneurship instructional themes (about/for/through) and Kolb's experiential learning stages. Reflecting on the COVID-19 pandemic, restrictions posed by educational institutions, the shift in learning environments and course delivery, and government regulations may alter the way experiential EE is delivered and may require additional support (technology, finances, networking, training, faculty, staff, etc.). We anticipate future developments in HEIs to spark new opportunities in entrepreneurship education that may prove to be inspiring and groundbreaking. ■

Table 1. Kolb's Experiential Learning Theory and the five innovative EE examples

EE SNHU example	DO	OBSERVE	THINK	PLAN
Munchiez Food Truck	✓	✓	✓	✓
LEAF	✓	✓	✓	✓
Inkwell Interactive Studio	✓	✓	✓	✓
Business Across Borders	✓	✓	✓	✓
The Fashion and Retro Room	✓	✓	✓	✓

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Appendix A

Interview questions

- What inspired you to engage in experiential entrepreneurship education related projects and coursework?
- To what extent have your academic studies or professional experience influenced your involvement?
- Please provide a short description of the project/course
- What has been the greatest challenge with this project/course?
- What has been the greatest opportunity with this project/course?
- What tools or technologies do you or your students use in your entrepreneurship project/courses?
- What is the overall impact of using tools and technologies in student learning?
- How do you measure student engagement?
- How do you measure the overall impact of the project/course?
- How is the overall teaching practice assessed?
- What are your thoughts on teaching practice assessments?
- Do you have any other thoughts to share on entrepreneurship related projects and courses?

Appendix B

Table A1: EE Instructional themes (Sirelkhatim & Gangi, 2015)

Instructional Themes	About	For	Through
Orientation	Theoretical based	Practical based	Practical based
Theme objective	Introduce the characteristics of entrepreneurship, entrepreneurial attitude, and economic success (Piperopoulos & Dimov, 2014).	Train students on the procedure of running a business (Bennett, 2006).	Launch business ideas to investors and experience the life of an entrepreneur.
Purpose	Choose entrepreneurship as a career choice by providing general knowledge in entrepreneurship (Fayolle & Gailly, 2013) and build confidence in becoming a self-employed entrepreneur (Klapper & Tegtmeier, 2010).	Simulate being an entrepreneur by practicing a portfolio of techniques.	Empower students to be entrepreneurs upon graduation (Vincett & Farlow, 2008), support a start-up business (Lundquist & Williams Middleton, 2013), and develop entrepreneurial competencies in students (Bridge, Hegarty & Porter, 2010).

Learning objectives	Gain insight and knowledge in business planning (Honing, 2004), marketing, financial management (Kuratko, 2005), business management (Solomon, 2007), entrepreneurial traits, personality characteristics, and economic success (Piperopoulos & Dimov, 2014)	Learn techniques for teamwork, planning a business, identifying opportunities, product distribution, and networking (Fayolle & Gailly, 2013; Piperopoulos & Dimov, 2014).	Learn through "real-life" entrepreneurship by experiencing the process of being an entrepreneur.
Teaching methodology	Lectures, textbooks, and guest speakers (Fayolle & Gailly 2008).	"Learning by doing" and experiential teaching methods (Fayolle & Gailly, 2013), business model simulations (Honing, 2004), SME and instructor consulting, monitoring, and networking with students (Piperopoulos & Dimov, 2014).	Person-induced business simulations (Klapper & Tegtmeier, 2010), incubators (Vincett & Farlow, 2008), internships (Wang & Verzat, 2011), and projects with other companies (Chang & Rieple, 2013).
Student engagement	passive	active	active

Experiential Learning through Short-Term Study Abroad: A Business Approach

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Introduction

Passarelli and Kolb (2012) suggest that an experiential education model can be useful in designing and assessing study abroad programs. As business school professors in the Driehaus College of Business at DePaul University who direct and assess short-term study abroad programs, we could not agree more. Our global framework not only encourages students to leave their comfort zones and experience unfamiliar cultural environments, but they are also provided with opportunities to explore issues of academic and business interest with academic, governmental, business, and non-business leaders in other countries. Moreover, they can also observe how public and private organizations operate in various parts of the world. Through study abroad, students leave the classroom, interact with key leaders in their countries, and learn through engagement, discussion, and immersion. The purpose of this paper is to explain how short-term study abroad programs developed in our college provide such possibilities for busy undergraduate and graduate students; moreover, we provide suggestions for professors wishing to implement similar programs at their own institutions.

Experiential Academic Programs

As early as 1938, researchers (e.g., Dewey, Mezirow, and Kolb) were putting forth ideas on the necessary and almost inseparable connections between learning and experience. In *Experience and Education* (1938), John Dewey wrote about the interconnectedness of a person's experiences over time (past, present, and future) and their overall educational path (i.e. continuity). Additionally, he stressed the importance of interactions people have with their environment and others around them. Dewey wrote that "amid all uncertainties there is one permanent frame of reference: namely, the organic connection between education and personal experience" (1938, p.25). This idea was expanded upon by researchers such as Mezirow (1991), who developed the Transformative Learning Theory (TLT). In his view, learning is based on "experiential activities or thought-provoking scenarios and the opportunity for new perspectives to be developed (due to) disorienting dilemmas" (qtd. in

Perry et al., 2012, p. 681). Mezirow provides a list of steps that lead to transformation, many of which focus on a "dilemma" (experience), examination and cognitive reviews of the dilemma, and adopting and applying the new perspective in subsequent experiences. This view is similar to dozens of other scholars such as John Dirkx and Malcolm Knowles who focus on not just the experience itself, but the interpretation and finally re-application of what was learned or gained for future scenarios.

Other theories also use steps or strategies to help dissect and explain the power of experiential learning. One of the most popular is that of Kolb (1984) who put forth one of the most widely known theories on the topic with his "simple description of the learning cycle." Similar to TLT, Kolb's theory begins with a "concrete experience" that is then processed through a series of steps that ultimately concludes with application to a situation accompanied by observation and reflection. These lead to the development of abstract concepts and generalizations which are then used by the person to create actions that are, in the end, tested in new situations which constitute a "new" experience.

What is agreed upon across theories is that experiential learning is interdisciplinary and heavily vested in real-world encounters that are filtered through a person's own past, present and, future. It is a transformative experience that has a foot in self-exploration while the other is potentially affected by emotional change. In addition, the individuals themselves play a significant role in the process of learning through experience. They must be open to the experience and the possibility of change. This is sometimes viewed as a weakness of study abroad programs being used as experiential learning.

All too often students are able to take a class without participating; pass a class without applying ideas; travel abroad without engaging in culture and topic or, more importantly, without absorbing or reflecting on the rich experience of the trip. Montrose (2002) recounts an interview with a recently returned study abroad student who could happily describe the trip, living situation, key events and fun engagements but struggled to describe any academic or educational impacts from the course. In truth, the stories of students who spent a semester abroad without learning a single word of the host country's language or not making any friends with any "locals" are rare. However, they do exemplify the need for rigorous, well-developed programs that will provide students with an environment in which they are primed to use their experiences for transformational growth, both personal and academic. This responsibility falls on faculty to create learning environments and provide supportive relationships with students going through the transformative process.

The National Society for Experiential Education (NSEE) has developed a set of guidelines (e.g., "The Principles of Good Practice") that can aid study abroad practitioners in creating such an environment. These principles add a third variable to previous theories: that of the facilitator. In the learning process and in the relationship between the learner and any facilitator(s) of learning, there is a mutual responsibility. All

parties are empowered to achieve the principles while at the same time, the facilitator(s) of learning are expected to take the lead in ensuring the quality of both the learning experience and the work produced, as well as supporting the learner to use the principles which underlie the pedagogy of experiential education. The eight principles of good practice are outlined in Table 1.

Background of Experiential Learning and Study Abroad at DePaul University

St. Vincent de Paul himself fostered a mission of providing assistance for those less fortunate. DePaul University in Chicago, Illinois has a long history of making "quality experience" a prominent part of a student's education. For example, all students are required

Table 1. NSEE Principles of Good Practice for Experiential Learning Activities

Category	Description
Intention	Intention is the purposefulness that enables experience to become knowledge. It is this deep sense of purpose that drives an experiential education program's goals, objectives, and activities, and that ultimately define the experience
Preparedness and Planning	Participants must be provided a foundation that will support their learning. Educators will need to identify intentions and adhere to goals, objectives, and activities as they are described. There will also need to be a plan set in place that is understood by all parties, one that should also be flexible in order to allow for any necessary adaptations that come from the experience.
Authenticity	The experience must have a real-world context and be applied to a certain setting for added meaning. This means that courses should be designed in collaboration with all members of the program (i.e., students, teachers and community partners).
Reflection	Reflection transforms simple experience into a true learning experience. The learner must test their assumptions, beliefs, decisions, and actions, and then weigh those considerations keeping in mind past learning and future implications. This reflective process is integral to all kinds of experiential learning, and can help educators adjust the experience and measure outcomes.
Orientation and Training	For the full value of the experience to be accessible to both the learner and the learning facilitator(s), and to any involved organizational partners, it is essential that they be prepared with important background information about each other and about the context and environment in which the experience will operate. Once that baseline of knowledge is addressed, ongoing structured development opportunities should also be included to expand the learner's appreciation of the context and skill requirements of her/his work

Monitoring and Continuous Improvement	Any learning activity will be dynamic and changing, and the parties involved all bear responsibility for ensuring that the experience, as it is in process, continues to provide the richest learning possible, while affirming the learner. It is important that there be a feedback loop related to learning intentions and quality objectives and that the structure of the experience be sufficiently flexible to permit change in response to what that feedback suggests.
Assessment and Evaluation	Outcomes and processes should be systematically documented in a way that can be widely understood. This form of assessment will develop and refine specific learning goals and quality objectives that were identified during the planning stages of the experience. This point also refers to a more comprehensive evaluation of the experiential process, and how it compares with the initially stated goals and objectives.
Acknowledgement	Recognition of learning and impact that occurs throughout the experience, which can be achieved through reporting, documentation and sharing of accomplishments. All parties should be included in the recognition of progress and accomplishment. In a sense, this celebration of learning and impact will then provide closure and sustainability to the experience.

Source: National Society for Experiential Education, https://www.nsee.org/8-principles.

to satisfy an Experiential Learning (EL) requirement in order to graduate. The objective is to ensure that students have at least one meaningful educational experience outside the classroom during their time at college. The requirement can be satisfied in a number of ways from community-based service-learning courses; internships with approved organizations; individual or group research projects involving extensive field or laboratory work; domestic study away programs focusing on diverse populations and locations within the United States; and study abroad programs that range from seven days to a full year abroad. The aim of the requirement is to push students into learning by doing, helping them to develop the skills to continue this learning after graduation.

Since the 1970's, the business school at DePaul University has been providing various international opportunities to students as one way to fulfill the university experiential learning requirement. One of the first short-term programs was to London and provided accounting students with the opportunity to learn about the differences between the British and American systems of accounting. Marketing faculty from Eastern Europe developed a program that sent students to the Czech Republic to study business and marketing in the post-Communist era. The program has since evolved into exploring the idea of doing business in the EU. In addition to the study abroad trip to the Czech Republic, faculty led a "Grand Tour of Europe" seminar that lasted roughly 4 weeks during the summer. Students then visited businesses and governmental agencies in several countries including Germany, France, Holland, and Switzerland.

An Asian business seminar to Taipei, Hong Kong, Shenzhen, Guangzhou, and Beijing was instituted in 1988. During the mid-1990s, it became increasingly evident that demand for short-term programs was exceeding the then current supply (roughly one program per year with a cap of 20 student participants), and the College of Business sought to expand its model to provide significantly more international opportunities for a larger population of students. At the same time, the university was moving towards a centralized study abroad program office that would utilize economies of scale and expertise to improve back-office functions (including application collection and processing, travel logistics and planning, and risk management procedures and safety protocols). The business and law school portfolios were two of the last to be assimilated into the university-wide short-term study abroad program.

In place for well over a decade, the current portfolio in the business school offers multiple four-credit short-term study abroad courses. The new structure was built around the quarter system and was designed to fit with students' work, internship, and academic schedules, allowing both undergraduate and graduate student populations to have meaningful international experiences. While the university offers multiple models for the creation and delivery of short-term programs, the business school continues to offer rigorous *faculty-driven* programs. Development begins with a professor submitting a proposal for a study abroad course that is organized around a theme and location of his/her choosing. Such themes might include "the business of sustainable energy" or "luxury marketing." The faculty member must demonstrate a clear connection between the topic and the need for it to be studied on a global level, and then tie the idea concretely to a specific geographic location (e.g., luxury marketing and Paris). Proposals are vetted by faculty on the college international committee where the team considers the academic quality of the proposal; how it compares with other programs with respect to locations, themes, and topic/location spread across quarters; and faculty qualifications to teach the topic selected. All programs are required to have at least 12 hours of pre-trip classes and are encouraged to host a post-trip reflective class upon returning.

Proposals must include a combination of both academic/theme-focused visits and cultural experiences. The initial twelve hours of pre-trip meetings are designed to: (1) prepare students for in-country experience through a discussion of culture; (2) prepare students for academic experience through lessons on the course topic and organizations to be visited; and (3) develop a rapport among the group. The knowledge gained is meant to set a foundation for successful high-level engagements with businesspeople, organizational leaders, and even government officials. The in-country portion of the seminar must then include at least five rigorous organizational visits (e.g. "board room" visits with representatives of various organizations; academic visits/lectures by faculty experts on the trip's theme; factory/industry guided tours; etc.). In addition, faculty are expected to build in a variety of cultural outings in which student participants will engage. These include opportunities such as sports matches, theatre performances, trips to heritage/historic

sites, connections with locals, or even alumni events sponsored by the University or business school. The travel portion of the course takes place between academic terms (fall quarter classes with a December intercession trip; winter quarter classes with a spring break trip; or spring quarter classes with a summer trip). Finally, upon their return, faculty are encouraged to host a final reflection class with discussions and/or presentations. This is in addition to assessment of the course material and some type of reflective writing assignment about their learning during the course.

In recent years, the College of Business has run roughly 10-15 programs per year. The 2018-2019 portfolio of short-term programs is listed in Table 2. In addition to the experiential learning requirement previously discussed, these short-term study abroad courses can also satisfy an international business requirement of the college called "Global Business Perspectives." The goal for this course is for DePaul business students to have a deeper understanding of international economies, institutions, business practices and cultures along with an awareness of differences across countries.

Detailed data on the student makeup of these courses are used to formulate strategic ideas for how to enhance and grow the overall College of Business portfolio (see Table 3). Short-term study abroad programs are available to all undergraduate and graduate students, and most accept students from other disciplines across the university when applicable. On average, undergraduates outnumber graduate students on these seminars by a three-to-one margin. In the past few years, there has been a surge in MBA student participation as supply chains become more integrated and students realize the networking opportunities available when interacting with leaders of foreign companies. Many faculty believe that graduate students bring additional experience and insights that actually improve seminar quality by enriching the experience for undergraduate participants. Another point worth noting is the gender difference on short-term programs. More women participate than men, despite the fact that only 42 percent of the undergraduate business population and 49 percent of graduate business population are female. This finding is consistent with empirical evidence reported in the literature (see for example, Salisbury et al., 2010).

In order for these programs to maximize educational benefits for students, they must be designed carefully to provide authentic international experiences. In both the development and evaluation of courses, faculty follow the guidelines previously laid out by NSEE to ensure programs conform to the eight principles of good practice in experiential education. The next section provides examples of two successful programs in our portfolio that showcase how short-term study abroad programs in business function through an incorporation of the aforementioned NSEE principles. We contend that academic rigor need not be sacrificed to develop high quality experiential programs; indeed, we insist that the academic component is the most (but not the only) important part of an engaging international experience.

Table 2. Examples of Short-Term Study Abroad Programs in 2018-19

Country	Title	Department of Faculty Director
Chile	Understanding Wine Supply Chains	Management
China	Business Behind the Great Wall	Management
India	Business and Culture in a Rapidly Growing Economy	Marketing
Switzerland	Exploring the Business of Global Nonprofits	Marketing
England	The Business of International Sports in London	Management
France	Understanding Marketing in Luxury Contexts	Marketing
Germany	The Impact of Innovation & Technology on Product Quality	Marketing
Ireland & Northern Ireland	Business Conditions in a Pre-Brexit World	Economics
Japan	"Hidden Champions" in Manufacturing, Innovation, & Start-Up Services	Marketing
Czech Republic and Germany	Business and the European Union	Marketing
England	Developing a Business Plan in London	Entrepreneurship
France and Switzerland	Exploring European Hospitality, Tourism, & Culture	Hospitality
Iceland, Denmark and Sweden	Sustainability in Action	Marketing
Hong Kong, Macao, and Singapore	Exploring the Growth of the Hospitality Industry in Three Colonial Pearls of Asia	Hospitality
Hong Kong & Shenzhen	Financial Services in Hong Kong and China	Finance

Short-Term Study Abroad Business Programs

Ireland and Northern Ireland: Business Conditions in a Pre/Post-Brexit World

Run for the first time during Spring Break of 2014, the program to Ireland (and later Northern Ireland) was designed by an economics professor interested in teaching about the rise of the Irish economy and its subsequent fall and recovery from the Global Financial Crisis of 2008-09. Although this topic in general can be discussed in business courses, the short-term program sought to enhance experiential authenticity by placing students directly within companies and government agencies in Ireland. Such companies and government

agencies (e.g., Central Bank of Ireland, Accenture, Citigroup, Deloitte & Touche and KPMG) specialized in addressing the effects of the financial collapse. Other company visits included Johnson & Johnson, Intel, and EMC[2], allowing students to observe global companies operating subsidiaries in Ireland.

In preparation and preparedness for the program, students attend four 3-hour seminars to ensure that they had a sufficient foundation to support a successful experience. Class topics focus on the structure and recent performance of the Irish economy and banking system as well as the development of skills useful for studying abroad. Students also begin the introspective and essential process of reflection during these preparatory classes, with at least half of each meeting focusing on students' questions and an immediate opportunity to reflect on the course material. This open dialogue assists students by gathering additional insights from their peers and faculty leader(s). A short take home exam due on the day of departure helps to verify that students absorbed the background knowledge before attending meetings. The exam also aids in advancing the assessment and evaluation principle by providing constructive feedback to help formalize a framework for their experiential transformation.

The travel portion of the first two iterations of the trip lasted nine days over the traditional spring break in late March. Weekends were typically used for cultural activities thus saving weekdays for business meetings or in-country travel. There was also time built in for students to explore the cities visited (Dublin, Cork, and Kilkenny) on their own or in groups in order to compare the city's business activity with what they had experienced at home. The program meetings were designed with various objectives in mind—a primary one aimed at avoiding redundant material—with each visit building on the experiences of prior visits. In addition to regular course content, many of the speakers brought in discussions related to a more personal view of Ireland, such as how

Table 3. Student Breakdown of Study Abroad Programs: 2010-2019

Term	Number of Programs	Number of Students	Percent Graduate	Percent Undergrad	Percent Male	Percent Female
AY2010-11	9	176	37.5%	62.5%	40.3%	59.7%
AY2011-12	13	243	30.9%	69.1%	45.7%	54.3%
AY2012-13	12	219	15.5%	84.5%	40.6%	59.4%
AY2013-14	11	209	20.6%	79.4%	34.4%	65.6%
AY2014-15	13	252	17.9%	82.1%	43.7%	56.3%
AY2015-16	13	233	13.3%	86.7%	39.1%	60.9%
AY2016-17	12	209	15.8%	84.2%	36.4%	63.6%
AY2017-18	11	181	26.5%	73.5%	31.5%	68.5%
AY2018-19	15	235	32.3%	67.7%	33.6%	66.4%
All Years	108	1957	23.0%	77.0%	39.0%	61.0%

individuals were dealing with the Irish financial crisis and recovery, and what it was like to work in Ireland. Other meetings were of a more general business nature, focusing on the presenters' own organizations and their roles in them. The diversity of businesses selected was purposeful to give students exposure to a wide range of business perspectives. This meant that accounting majors and marketing majors both found meetings that were directly relevant to their own areas of specialization and all benefitted from an exploration of issues related to the export business within and from the EU. Meetings typically lasted around 90 minutes with at least half of each meeting left for questions from the students. After the meetings, students are given the opportunity to offer reflective commentary as they made connections between what different speakers and organizations presented.

Upon returning to campus, students are required to write a reflective essay on an experience they had from the program. The essays are due within a week of return to capitalize on fresh memories and deepen learning. In addition, students are required to write a term paper on an Irish business topic of their choice. This has resulted in many examples of high-quality work. For example, one student interested in the food industry wrote about how Brexit will affect the trade in food products between Ireland and the UK, and the knowledge she gained landed her a job with a consulting firm helping companies deal with the regulatory changes that Brexit has wrought. Another excellent paper came from a student from Nashville, Tennessee, who wrote about the influence of Irish music on the global music business, with special attention to the linkages between Irish and American country music. In both of these cases, students combined their own life experience with what they learned on the seminar to produce outstanding work.

The final post-trip meeting is typically a class combined with a meal to allow everyone to reconnect and reflect on their experiences. Occurring within a month of the end of the travel portion of the seminar, this time allows for a completion of the study abroad experience, and the celebration of learning and impact provides closure and sustainability to the experience. Final papers offer the faculty leader with an opportunity to observe how students benefited from the seminar.

The first two trips (2014 and 2015) followed this basic model. After a year off, the program was revised with an important change that stemmed from the June 23, 2016, majority vote in the UK to leave the EU. Within the UK, a majority of Northern Irish voters supported remaining in the EU, presenting an opportunity for a different educational experience by splitting the seminar between two cities: Dublin and Belfast. This gave students the chance to travel to two countries, use both the euro and British pounds, and observe how Brexit is viewed from both an Irish and a Northern Irish perspective. While there are some excellent written materials on how Brexit would affect Ireland and Northern Ireland (e.g., Connelly, 2017), going to these countries and having a dialogue with business and government leaders provided a deeper, more nuanced understanding of the complexity of these issues. This timely change

turned out to be an even richer environment for creating experiences that could transform student thought, behavior, and applicable business knowledge. For example, in Dublin, the students visited Bord Bia (Irish Food Board) which is involved in both EU/UK negotiations on Brexit details as well as preparing food companies for the changes that will occur. In Belfast, the students visited Danske Bank (a Danish bank that bought the largest bank in Northern Ireland) to learn how banking technology is evolving and how Brexit is likely to affect business conditions. Students also visited the Chicago Mercantile Exchange (which operates a rapidly growing technology center in Belfast) to see its role in the company's worldwide operations and learn about Belfast's growing role as a technology center. This seminar was conducted three times from 2017 to 2019 and is slated to run again in 2022 to immerse students in a Post-Brexit world.

Switzerland: Exploring the Business of Global Nonprofits

Starting in 2010, Switzerland: Exploring the Business of Global Nonprofits course was proposed to fill a specific area of interest for many millennial and incoming Generation Z students. The proposing marketing professor already taught a first-year program course on nonprofits and communities in the city of Chicago and wished to expand to a global program showcasing the broader power and reach of organizations from the United Nations down to smaller grassroots international nonprofits. The specific purpose or intention of the program was to introduce business students to the concept that although the business school successfully prepares students for the for-profit world, opportunities were plentiful in the third sector, or the non-profit/NGO/social enterprise areas where traditional business skills were needed, and the mission or vision of the organization would be more applicable to social and environmental objectives (an application of authenticity).

For preparation and preparedness, students meet on four separate nights for three hours each to engage in lecture and discussion in three areas: nonprofit content, cultural preparedness and rapport building. Academic content explores the background of nonprofit business strategy including issues related to marketing, logistics, and finance, with the goal of preparing students for high-level discussions with representatives from various organizations while in-country. Cultural preparedness focuses on the vast differences between the United States and Switzerland and includes background information on history, neutrality, and politics. In addition, students are introduced to the idea of the four cultural/linguistic regions, two of which were to be visited during the program (Zurich and Geneva). Readings and discussion posts on Swiss culture are used as a way to assess student knowledge and growth on both academic and cultural topics. The fourth and final class is reserved for student presentations where teams of two are responsible for leading in-depth discussions about one of the organizations to be visited on the trip. Additional features of this presentation include the creation of color handouts that contain background information, interesting facts and possible "QTAs" (questions to ask). These summary sheets are then used as a mini-reference book for the trip to refresh their knowledge prior to each visit, and to help stimulate discussions with the speakers.

The course runs during the fall quarter with travel beginning the week after the Thanksgiving holiday. Starting in Geneva, the first night begins with a lengthy walking tour to orient students to their new home. This is followed by a group dinner accompanied by live Swiss music. The following morning starts with a visit to the United Nations where an educational tour is used to set the stage for a lengthy discussion of politics and their role and influence on nonprofits. Additional visits with UN sub-organizations such as the World Trade Organization (WTO) to discuss world financial structures and strategies; UNICEF (the United Nations Children's Fund) to see how business principles are used to bring programming and outreach to areas in need; or the World Labor Organizations (WLO) where students meet with marketing and communication professionals. Other non-UN specific organizations fill out the rest of the 10-13 visits conducted during the 11-day trip. These include boardroom style visits with WWF (the World Wildlide Fund for Nature), the International Red Cross, and Red Crescent (ICRC) to discuss humanitarian actions, business law, and administrative management of programs; the Schwab Center for Social Entrepreneurship at the World Economic Forum which supports and broadens the scope of social enterprises; and the Environmental House of Geneva (a nonprofit think-tank). Each visit builds on the information offered by previous organizations. One other benefit of having a large diversity of topics is that each student can find one that is in an area they personally connect with either vocationally, academically, or emotionally. The connectedness then brings a deeper understanding of the power and challenges of nonprofits. In addition, the Geneva portion has many cultural activities, including a private tour of the Museum of the Red Cross.

The end of the first week brings a transition from Geneva to Zurich via bus, making a variety of cultural stops which might include a trip to Lausanne, Montreux (Christmas Market), the Chateau de Chillon, Gruyere Castle (with traditional raclette lunch), and/or the Caillier Chocolate Factory. Zurich begins much the same way as Geneva, with a walking tour of the city including the massive Christmas market in the main train station, followed by a traditional meal to help settle students into the new city and culture. Continuing the exploration of business and nonprofit issues, visits focus on different organizational themes such as politics, sports, and corporate sponsorships at FIFA; the impact of independent funding (versus governmental) at Doctors Without Borders where transparency of communication is a key tenet; or the struggles faced by smaller grassroots global organizations at ROKPA International, a Swiss-based nonprofit that runs schools, hospitality programs, soup kitchens, and social programming for women and children in Nepal and Tibet. Throughout all of the visits, the students are asked to apply traditional business ideas, concepts, and strategies. A final cultural adventure is always provided where students go to a high peak in the Swiss Alps.

At the conclusion of the trip, undergraduate students are tasked with producing a comprehensive final paper. Half of the paper is a formal application assignment, taking ideas from the visits and answering a series of in-depth

questions on how to apply those ideas to national and local third sector organizations. Graduate students are asked to dive deeper by developing social good/nonprofit marketing plans that utilize course information, examples from organizational visits, and local application. The other half of the final work for both groups of students is a reflection on the academic, cultural, and social experiences from the trip. Students are asked to share any special experiences they had outside of the class program that made an impact, and to explain the breadth of that impact on their learning. The immediate reflection and reapplication are used to fully set the ideas gained through the trip and to stimulate additional thought and transformation. In addition, it aids students in the application of new ideas to other areas. A final class is scheduled but is not mandatory as many students graduate in the December intercession and are unavailable in January. During these meetings, we read aloud from our reflections and discuss the overall impacts of the program.

Conclusions and Recommendations

This paper describes a set of short-term study abroad programs that are organized around topics generated by faculty. The themes and locations can be quite diverse which gives students many choices for an international experience that can fit in with their busy schedules and diverse interests. They appeal to both graduate and undergraduate students, and although specific to business they seem to draw other students from disciplines such as political science or social justice. The overall argument made here is that academic rigor need not be sacrificed to develop high quality experiential programs; indeed, we contend that the academic component is the most (but not the only) important part of an engaging international experience. The principles that NSEE expounds are a useful guide for designing and implementing these programs and serve to provide an easy-to-follow foundation. Administration and faculty who oversee and monitor programs through an international committee serve as important gatekeepers for the maintenance of overall program quality.

There are still challenges to be faced, even with a program that has a long history such as the one described here. One of the challenges of this model is that it is hard to scale upward. Faculty have to be proposing trips in order for the program to grow, and with growing opportunities for faculty enrichment at universities, study abroad may not be a top priority because of the complexity of design and the extended travel it requires. For example, a typical faculty member may make the same overload stipend for a summer class as they would a study abroad course, and get to stay home with their family. Therefore, additional ways of recruiting and developing new faculty is crucial in the growth and continuation of any program portfolio. In addition, without new programs the number of students that can be served remains fairly low, with many students being left behind due to capacity issues. The programs described here have a maximum number of participants set at 20-22 as larger groups find it difficult to find hosts abroad as office space is small, and traveling by bus or tram can be challenging with so many traveling together. Nevertheless, this paper showcases the idea that programs driven by a faculty

member who is passionate for their subject and location can provide the type of engaging experiential learning courses for students of which we can all be proud. ■

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Coaching and Experiential Learning in an MBA Leadership Certificate Program

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Introduction

The pandemic that plagued 2020 and 2021 has exposed the need for businesses and universities to rapidly adjust to the globe's dynamic and volatile environments, in order to create and sustain competitive advantages. University educators, particularly those in tuition-driven institutions, worried about first year admissions, enrollments, and ensuring safety in a time when so much in the world was unknown. What was known during this time, however, was that universities would still be delivering courses in either online video calls (with software such as Zoom) or face-to-face meetings following government guidelines, or a hybrid of both. No matter the distance of the classroom, many educators were called to ensure high quality content through experiential deliveries.

In MBA programs, university instructors operate with the knowledge that they're helping to train and develop current and future world business leaders. Various approaches are used to that end, but one particularly effective means of leadership development is by pairing students with coaches (Lawrence, Dunn, & Weisfeld-Spolter, 2017). Coaches use self-assessments, reflections, and goal-setting to impact engagement and academic success in educational institutions (Robinson & Gahagan, 2010). One meta-analytic study of coaching in organizational contexts found that coaching has a positive impact on performance/skills, coping, work attitudes, goal-directed self-regulation, and well-being (Theeboom, Beersma, & van Vianen, 2013), which are obviously beneficial to those being coached. Given these beneficial outcomes, offering coaching in MBA programs may be one way to distinguish universities from competitors, which may be particularly useful in times of economic uncertainty.

In the present study, we used Kolb and Kolb's (2017) framework to examine reflection papers from the coaching component of an MBA leadership certificate program at a medium-sized university in the southeastern region of the United States. This study is a single-site case study (Stake, 2006; Burns & Danyluk, 2017) that examined one bounded university context. We examined ways participants set goals, contextualized their experiences, and considered ways to achieve their goals in the midst of the

pandemic in the fall of 2020. We made our observations through the lenses of educator roles in the Experiential Learning Cycle, which are two components of Experiential Learning Theory (Kolb & Kolb, 2017). Experiential Learning Theory provides an intellectual foundation for the practice of experiential learning (Kolb & Kolb, 2017). Its components include the Experiential Learning Cycle, Experiential Learning Styles, and Experiential Learning Space. During the Experiential Learning Cycle, educators wear multiple hats as facilitators, subject experts, standard setters and evaluators, and coaches. The present study provides evidence in support of these components of Experiential Learning Theory via the use of student reflection papers in the transformation of knowledge. Educators who establish coaching programs in educational institutions may find our examples helpful in building their own programs.

The Experiential Learning Cycle

The Experiential Learning Cycle is a holistic, dynamic process that starts with a concrete experience, followed by reflective observation, abstract conceptualization of the experience, and active experimentation. According to Kolb and Kolb (2017), through the cycle of learning "all participants receive information through concrete experience of the subject matter and transform it through reflection and conceptualization and then transform it again by acting to change the world including what information is attended to in the new experience" (p. 16).

Educator Roles and the Learning Cycle

Educators can use a variety of means to ensure their learning outcomes are met. Kolb and Kolb (2017) reported one means:

> In our interviews and observations of highly successful educators, we find that they tend to organize their educational activities in such a manner that they address all four learning cycle modes—experiencing, reflecting, thinking, and acting—using some form of the dynamic matching model in the roles they adopt. We developed a self-assessment instrument called the Kolb Educator Role Profile (KERP) to help educators understand their own teaching approach from the perspective of teaching around the learning cycle (p. 17)

According to Kolb and Kolb (2017), roles are specifically applied to the learning cycle in the following ways. At the concrete experience phase, the educator is a warm and affirmative facilitator who creates a personal relationship with the student, promotes inside-out learning, and focuses on meaning. Inside learning is centered on the self, while outside learning is centered on content, so inside-out learning bridges outward-focused content and an inward-focused process to move from superficial reflections to reflective analysis and introspection (Hubbs & Brand, 2010). At the reflective observation phase, the educator is a reflective, authoritative subject expert who analyzes and organizes the subject matter. At the abstract conceptualization (thinking) phase, the educator is a standard setter and evaluator who sets performance objectives. At the active experimentation phase, the educator is a coach who works one-on-one with learners and provides developmental feedback. Kolb and Kolb (2017) note that all phases of the Experiential Learning Cycle are experiences, not simply the "concrete ex-

perience" phase. As the authors note:

> Many use the term experiential learning to refer to exercises and games used to involve students in the learning process. However, a classroom lecture may be an abstract experience but it is also a concrete one, when, for example, a learner admires and imitates the lecturer. Likewise, a learner may work hard to create an abstract model in order to make sense of an internship experience or experiential exercise. From the learner's perspective, solitary reflection can be an intensely emotional concrete experience and the action of programming a computer can be a highly abstract experience (Kolb & Kolb, 2017, p. 13)

In the present study, we questioned whether the *educator roles* in the Experiential Learning Cycle posited by Kolb and Kolb (2017) would help to frame and inform an MBA leadership certificate program with a coaching component. We examined qualitative student reflection papers to address this research question. The present research expands upon findings from a prior exploratory qualitative study of themes derived from reflections on MBA coaching sessions (Thomason, Andersen, Gupta, & Rustogi, 2021).

MBA Leadership Certificate Program

In 2010, we moved from a 3-credit model to a 4-credit model in the undergraduate and graduate programs in the College of Business and significantly revised our Masters of Business Administration (MBA) program requirements. Among changes, we began to require a 4-credit professional development practicum in which students could choose from a variety of experiential options to complete. We designed these options to be "REALISTIC," which is an acronym we used at the time to describe our pillars of experiential education. The acronym REALISTIC includes **R**esearch, **E**ducation **A**broad, **L**eadership, **I**nternships, **S**ervice Learning, and **T**eaching **I**nteractively in the **C**lassroom. These pillars closely aligned with the course requirements of the Experiential Education Academy of the National Society for Experiential Education, yet we explicitly added a leadership pillar to fit in with the overall vision and mission of our College of Business. We designated education abroad courses, internships, SAP (enterprise resource planning) certification workshops, independent research studies, and other courses for meeting our practicum requirements, and we designated certain faculty as program overseers to approve students' selections. By 2016, we decided to add three 2-credit courses to provide additional options for students. These three courses focused on business communication and interpersonal skills, career development, and leadership.

We invested significant time in the latter offering by creating a leadership certificate and integrating feedback from focus groups of community leaders and members of our Center for Leadership. Our leadership certificate is a team-taught course that provides content on current issues in leadership, advancing in an organization, and implementing leadership concepts. Within the current issues are modules on the essence of leadership, our Strategic Leadership Workshop, and multigenerational implications for the future at work. The second section features modules on legal issues in human resource management, leading teams and increasing pro-

ductivity, integrative negotiations, and mastering innovation by tapping into an entrepreneurial mindset. The implementation section includes modules on strategic thinking, blue ocean strategy and blue ocean leadership, and participant personal action plan presentations.

We developed our leadership certificate to achieve the following learning outcomes: "At the conclusion of [the leadership course], students will be able to thoughtfully reflect upon and effectively communicate how their experience (1) enhanced their career development objectives, leadership skills, and interpersonal skills, and (2) increased their involvement in the academic community and the business and professional community." We have strived to continuously improve our leadership certificate offerings over the years by attending closely to student learning outcomes and course feedback. The feedback from the program has consistently suggested one of the strongest elements of our MBA leadership certificate program is our coaching component to which we now turn our attention. Since 2003, we have paired our MBA students with professional coaches who are either community leaders or members of coaching groups such as the International Coaching Federation. In 2016, we formalized these offerings by integrating coaching into our leadership certificate. We assign participants with coaches to help students achieve their personal action plans and goals.

MBA Coaching

In the beginning of the fall of 2020, we asked 21 students who were enrolled in an MBA leadership certificate course to participate in an IRB-approved research study that would identify themes from their reflections on their meetings with their coaches. Of the 20 who agreed to participate, 13 were male and 7 were female. Most of the coaches in this cohort were affiliated with the International Coaching Federation and many had served our university voluntarily for years. Oftentimes the relationships between students and their coaches continued far past the end of the semester.

To enhance experiential education, we designed our program to align with the eight principles of best practices of the National Society for Experiential Education (1998), which are to (1) establish intention; (2) prepare and plan; (3) ensure authenticity; (4) orient and train; (5) include reflections; (6) monitor and ensure continuous improvement; 7) assess and evaluate; (8) and acknowledge and recognize success. Our *intentions* align with the mission of our college, which is to provide educational excellence. We believe educational excellence is best achieved not by the "sage on the stage," but by more student-centered, outcomes-focused, personalized learning approaches such as those provided in one-on-one student-coach relationships. To ensure students are *prepared* for our MBA coaching experience more specifically, we provide relevant required readings on leadership, coaching, and professional development prior to our Strategic Leadership Workshop. Our Strategic Leadership Workshop is facilitated by two seasoned coaches from the International Coaching Federation. The inclusion of these seasoned coaches helps to establish *authenticity*. The workshop is a 3-hour-long activity-filled session where the two coaches share insights and lessons from their own experiences and the assigned readings. They further facilitate

multiple meetings during the workshop for the students and coaches to complete a variety of experiential goal-setting exercises. Following the workshop, students meet three times with their coaches to discuss their plans and goals for the semester and beyond. They are required to contribute one structured *reflection* paper after each of their three meetings. Our MBA coaches have been provided a six-hour (over two nights) *training session* to ensure consistency in student coach interactions. In this session, we ask our many seasoned coaches to meet with our new coaches to share best practices. They often engage in role-play exercises where the newer coach acts as a student and the seasoned coach acts as his or her coach. Once our coaches have been trained, we assign them (usually no more than) one or two students per semester. Each year, we *continuously monitor* learning outcomes, coach training feedback, and student reflections to ensure our coaching program is benefiting our students in positive, impactful ways. We *assess* learning outcomes through readings, lectures, participation in and contributions to group discussions and exercises, participation in the graduate coaching program, and an individual five-page paper and presentation. The program culminates with each student presenting his or her leadership plan to our course facilitators and members of our Leadership Center's Board of Directors. We *acknowledge* and celebrate their achievements by presenting their leadership certificates to them in a formal way by calling their names, awarding them certificates, and playing traditional graduation ceremony music (such as "Pomp and Circumstance"). We further acknowledge and celebrate our coaches by hosting a celebratory dinner at the end of each spring. In the spring of 2020 and 2021, however, we have had to postpone these dinners due to the COVID-19 pandemic, but we plan to resume the dinners in the spring of 2022.

By the end of the fall 2020 semester, each of the participants had submitted three reflection papers, which the first author of this manuscript analyzed and coded according to the four phases in the Experiential Learning Cycle. The author identified whether portions of the student reflections were consistent with Kolb's expectations of educator roles during the process and created an Excel spreadsheet with quotations from the participants under each of the categories. The second author separately examined the reflections and quotes to establish interrater reliability, which we achieved when we came to a full agreement. Though the participants were not primed to consider the Kolb and Kolb (2017) framework, we found remarkable consistency in the way their responses could be applied to the framework. During the concrete experience phase, 70 percent reported they had developed a personal relationship with their coaches. While reflecting on their experiences, 90 percent reported that their coaches helped them to analyze and organize the subject matter. Through conceptualizations, 90 percent reported their coaches set performance objectives and standards. Finally, while testing and acting upon what they learned, 70 percent reported their coaches provided one-on-one developmental feedback. The next portion of this study will present the phases of the Experiential Learning Cycle along with five representative quotes for each from the aforementioned reflection papers.

Concrete Experience

Students met with their coaches for the first time in the second week of classes at our Strategic Leadership Workshop, which we delivered via Zoom (due to COVID-19). Prior to the workshop, we asked students to send short biographies to the second author, which she compiled and forwarded to the coaches. The coaches then chose the students with whom they planned to work. We asked students to read several leadership articles and watch Simon Sinek's Ted Talk on "The Big Why." During the workshop, students shared their "Big Why," which was a sentence on their purpose in life. Most expressed the desire for purpose and meaning, often saying they wished to make the world a little better than the way they found it. The coaches also shared their own "Big Why" mission statements. Participants next met with their coaches in Zoom breakout rooms. At the close of the workshop, students were given instructions to meet with their coaches three times over the semester for a period of an hour each time either face-to-face or in person, depending on what the two agreed upon.

Table 1. Student Reflections on the Concrete Experience Phase

Student ID	Warm and affirmative facilitator who creates a personal relationship, promotes inside-out learning, and focuses on meaning.
2	"As I began to open up to [my coach] towards the end of the class session, he made sure he remembered important things about me (like one bad experience with a client that I briefly mentioned) .... [My coach] and I both opened up about our past and what has led us to where we are today. This helped so much because I realized we had so much in common especially personality types. The main thing I enjoyed learning about is that we both like to learn about the mind & the way people think as we use that to implement it into our daily life."
3	"Right off the bat, we spent 30-45 minutes (of our hour-long session) talking about our backgrounds, work experience, and family life. After hearing about my work-life and personal life, he quickly identified that time management was a topic we should discuss and drill into."
5	"[My coach] was very relatable, making it a point to talk to me like a colleague instead of a student...The session felt extremely personalized and my coach made me feel comfortable by sharing her own personal struggles. I felt like she related to my story a lot because she also had issues with confidence when she was starting out. Looking at the woman she is today, I felt confident in all the advice she gave me on growing and improving as a leader."
16	"My original expectation, of skepticism, was disproven by the sheer professionalism and intuition that [my coach] brought to the table. I underestimated my coach's ability to acutely analyze and assess the responses and feedback I was providing. I was impressed with her keen sense of active listening. By doing so, she was quick to pick up on some of the drivers and root causes to some of my leadership blind spots."
19	"My expectations were exceeded by [my coach's] personality, we got along great she was easy to talk to and I loved all her advice about managing my stress levels. My Coach was able to help me take a closer look on how many other aspects of my life uses Logistics and how I might be able to take my passions and convert them into a fulltime job."

The approaches our MBA coaches used in their coaching sessions with the students varied as a function of the coaches' and students' preferences. Most coaches gave students homework assignments, such as reading books on leadership or overcoming challenges. They also directed students to identify their goals and create an action plan with specific deadlines to achieve the goals that they and their coaches had set. Table 1 presents participant reflections on their experiences with their coaches, which include comments about the personalization of the experiences and relationship-building.

Reflection

According to Kolb (1984), reflection is a component of learning that builds upon existing knowledge to develop better understanding of one's concrete experiences. Previous studies have found that structured written reflections significantly increased personal growth and personal self-efficacy, while unstructured reflections resulted in no changes in growth or self-efficacy (Sanders, Van Oss, & McGeary, 2016). Reflection in a university context has various characteristics. As Dobbs-Oates notes, "[s]ome of the key characteristics of reflection my students consistently notice are that reflection is active and intentional, that reflection is repeated and

Table 2. Student Reflections on the Reflection Phase: What?

Student ID	Reflective and authoritative subject matter expert who analyzes and organizes the subject matter.
1	"When managing procrastination, [my coach] first explained to me that reprioritizing and understanding the importance of goals and tasks is a very crucial step...[My coach] explained that simple things such as using a calendar, setting reminders, setting alarms, using a planner, etc. are all very effective methods of limiting procrastination."
4	"A quote from [my coach] that really stuck out to me was 'Managers are judged on their behaviors, not on their intentions.' A big take-away from our MB discussion was for me to constantly self-monitor (not obsessively though!). I need to ask things like, 'What didn't I ask that I should have?' Additionally, monitoring how I phrase my questions is hugely effective."
8	"I have thought about being an account manager, a fundraiser for a non-profit, a corporate social responsibility manager, nonprofit consultant, and even working in sales. While these jobs have many differences, [my coach] helped me identify a common theme which is that I enjoy roles where I can interact with customers. I also enjoy roles driven by metrics, such as a sales or fundraising position where I have a clearly defined goal."
11	"In order to grow as a financial advisor, we discussed that one must be very personable and surround themselves with the right people. [My coach] recommended looking at things like Facebook groups, Eventbrite, Meetup.com and LinkedIn groups."
12	[My coach] not only gave me feedback on my plan but also started immediately thinking about ways he could connect me to the right people. He encouraged me by telling me he liked the plan I had come up with and made me feel confident in what I was going to do."

extended over time, and that reflection is careful and thoughtful. Often, it falls to me to mention that reflection involves connecting ideas to evidence and to conclusions as well" (2021, p. 11).

In the present study, we asked students to complete written reflections using the DEAL model of structured articulated learning (Ash & Clayton, 2004) where they (1) identified and described an expectation they had prior to the coaching experience; (2) specified how the expectation applied; (3) analyzed the ways their expectations were not met, met, or exceeded; and (4) evaluated how the coaching experience could have been improved. The DEAL model addresses the questions, "What?" "So what?" and "Now what?" (Koustas & Blais, 2021). These questions are also answered through Experiential Learning Theory in that the reflection phase answers the first question, the abstract conceptualization phase answers the second question, and the active experimentation phase answers the final question. According to Koustas and Blais (2021), the "what" question gives learners the opportunity to describe their experiences in detail. Table 2 presents quotations from participant reflections where they honed in on their own learning, development, and goals.

Abstract Conceptualization

Koustas and Blais (2021) note that the abstract conceptualization phase coincides with asking "So what?". Learners not only report their experiences, but they describe what their experiences meant to them. Table 3 presents quotations from participant reflections where they worked closely with their coaches to set goals and performance objectives, noting the impact and meaning of their goals.

Active Experimentation

As noted by Koustas and Blais (2021), the active experimentation phase involves asking the question "Now what?". Table 4 presents quotations from participant reflections where they discussed their take-aways and action plans. They often re-framed their circumstances in the context of their meetings with their coaches and new outlooks they developed.

Conclusion

Previous research has found that MBA programs can add value to MBA alumni and the organizations for which they work through increased knowledge and skills (Gupta & Bennett, 2014). In the present study, we detailed the way we developed our MBA leadership certificate program and its MBA coaching component. Within the latter context, we analyzed student reflection papers through the lenses of the Experiential Learning Cycle and educator roles to identify student examples of learning and knowledge transformation. Our findings indicated that students worked with their coaches to set goals and create action plans with deadlines to achieve their goals. The variety of approaches and experiential learning activities the coaches used helped to strengthen their relationships with the students and to help them learn and often re-frame their circumstances to positively enhance their development and knowledge.

Our findings can be used by coaches and educators to strengthen student/coach relationships and to establish a framework through which we can better understand the dyadic relationships between students and their coaches. Coaches may consider explicitly structuring their conversations with students

Table 3. Student Reflections on the Abstract Conceptualization Phase: So What?

Student ID	Standard setter and evaluator who sets performance objectives
2	"We created two separate sessions (personal and professional) we also created timeframes for my goals (years, months, weeks, daily). We had some fun and talked about the model 'fake it until you make it' which means if I fake that I enjoy my 5 am run every day, I will trick my mind into actually begin to enjoy that activity."
3	"This session was all about my 5-year plan. My homework prior to this session was to populate an Excel document that contained a couple columns: i. What makes me happy? ii. What traits and skills am I proud of? iii. What do I not enjoy? iv. What do I want more of?"
7	"My expectations were exceeded because not only did I gain clarity and understand where my weaknesses are, he helped me set SMART goals on how to tackle these tasks and issues."
13	"Due to the first session was talking about my past, so for the second time I thought it would be the same. However, coach brought me to set up the goals and thought about my "why"."
14	"I really appreciated her point of view and that she was so quick to start setting short term goals for me. I need someone who can guide me and hold me accountable to these actions."

using Experiential Learning Theory roles and the four stages (experience, reflection, abstract conceptualization, experimentation) of the Experiential Learning Cycle to transform their experiences into knowledge. Our findings can also be used by educators interested in Experiential Learning Theory (Kolb & Kolb, 2017) as it provides some qualitative support for educator roles and the Experiential Learning Cycle.

We should add that our findings are not without limitations due to the generalizability of our relatively small single-university-based sample. Future studies may consider applying the Kolb and Kolb (2017) framework to other contexts and locations. Future studies and coaching administrators and facilitators may further consider ways to ensure that 100 percent of the dyadic coach/student relationships include the four roles of the Experiential Learning Cycle as the present study ranged between 70 (stages one and four) and 90 percent (stages two and three). An examination of whether achieving 100 percent may enhance learning outcomes is certainly warranted. ■

Table 4. Student Reflections on the Active Experimentation Phase: Now what?

Student ID	Coach who works one-on-one to provide developmental feedback
6	"What I took away most from our last conversation was that I need to relax and realize that this position is more of a marathon than a sprint. I should implement change, but doing so in a slow and patient way. [My coach] explained that although it may seem daunting to go from one end of the spectrum to the other as far as leadership and management styles go, you can get there by making slight changes, rather than making all the changes at once. This was really a crucial lesson for me to absorb and made me feel much better about the situation. I also felt that Bob really started to help me see the vision that I see for myself in a leadership role at my company."
12	"Not only did he help me understand what I wanted to do but also he is actively helping me attain my goals in any way he can. As a student who came into this coaching with no expectations his effort is all I can ask for and he has given me that."
15	"Further, the description of results-oriented people as prioritizing independence and preferring to work alone resonated very strongly with me. I do believe that I have good listening and interpersonal skills, but I recognize that my style can be overbearing. In fact, during the third coaching session I received a call from one of my oldest friends. As I needed to quickly convey information, I was very direct, curt, and perhaps even rude. [My coach] pointed this out, and while I tried to offer up an explanation of my friend, who is known for being slow to hang up the phone, his point was salient.?
17	"I had to ask [my coach], 'Where do I go from here and how do I change?' I needed help from an outside perspective to guide me away from my fear of rejection in leadership. Angela had a few practical steps that helped open my eyes: 1). Become Aware of the fear or negative thoughts. 2). Distinguish between the lie and a truth 3). Write down the negative thought that comes up as this will prevent suppression and 4). Start a gratitude journal to begin fueling my brain with gratitude and appreciation. [My coach] explained the physiological side of address-ing this in a practical way: writing down the fear will literally move the thought from the emotional right side of the brain where the emotional impact occurs into the analytical left brain where you can challenge the emotion with truth. [My coach] encouraged me to try this tactic every time I began feeling vulnerable. She went on to further explain how the daily gratitude journal was only possible if and when I removed the 'junk' thoughts."
20	"A recurring theme emerged that focused on ensuring that all views and experiences were taken into account during the decision-making process. The interactive exchange between myself and [my coach] was extremely beneficial in continuing to develop and enhance my own leadership style."

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Exploring the Catalyst Energizing the Kolb Learning Cycle

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Models are important devices used to identify important key elements of significant processes. General models may formulate logical links between variables, while specific models include measured parameters that lead to reasonable predictions. "Models can make logical connections easier to see. Often the consequences or results are well known and very visible, but the processes that caused those results are difficult to assess" (Karban, Huntzinger & Pearse 2014, p 29). Much has been published concerning Kolb's experiential learning cycle, however research does little to examine the driving force of the learning cycle (Naeem Akhtar, 2020). What compels the learner to test the new knowledge to create new experiences? What is the catalyst that initiates the experience to continue? What causes the cycle to stop, terminating learning from that experience?

The purpose of this paper is to make visible the interconnectedness of three unrelated free-standing but validated models: Kolb's model of experiential learning (Kolb, 1984; Kolb, 2015), Hidi and Renninger's model of interest development (Hidi & Renninger, 2006), and National Research Council's (NRC) ecological framework of an experience (NRC, 2009). Together, these three models describe the quality of the experience, the cyclic processing of the experience to create knowledge, and the force driving the cycle. It is not the intent of this article to compare or eliminate the models, nor to provide an exhaustive review of each model. The three models will be briefly described, leading to an explanation of how their assimilation can benefit experiential learning theory.

Experiential Learning Theory Model

Kolb established a model based on perception and processing, that all learning is determined by how an individual processes an experience (Kolb, 1984; Hurst-Wajszczuk, 2010). As Kolb developed the model, he illustrated the two concepts of perception and processing as separate intersecting lines, reasoning, "the modes of active experimentation and reflection, like abstractedness/ concreteness, stand in opposition to each other" (Kolb et al., 1974, p. 29). A learner can do only experimentation or reflection, not both at one time. Kolb recognized that "reflection tends to inhibit action and vice versa" (Kolb et al., 1974, p. 29).

Kolb's (1984, 2015) experiential learning theory (ELT) provides a strong,

coherent explanation of how humans learn through experiences. ELT highlights that learning is a result of undergoing an experience and then converting it into an application or outcome. Simply stated, Kolb's model describes a spiral four step process beginning with a concrete experience, leading to reflection of what was observed, critically analyzing the observations into abstract concepts, experimenting on those new concepts, leading back to testing through another concrete experience. The cycle continues by the learner utilizing the enhanced knowledge.

Of particular interest is Kolb's experiential learning cycle (Figure 1, squares). Concrete experience is logically recognized as the first stage of the experiential learning cycle, although it has been suggested that learners can begin the cycle at any stage (Healey & Jenkins, 2000; Hurst-Wajszczuk, 2010; Kolb, 2015; Raschick et al., 1998). The concrete experience stage (feeling/sensing) phases into the reflective observation stage (watching), leading to the abstract conceptualization phase (thinking), then progressing to the active experimentation phase (taking action), leading to a new version of the concrete experience phase, and the cycle continues so long as the cycle is unbroken. Hurst-Wajszczuk (2010) proposed the stages could progress in any order, so long as all four processes take place. "One might begin with active experimentation, for example, and then proceed to reflective observation and concrete experience, before arriving at abstract conceptualization" (Hurst-Wajszczuk, 2010, p. 422).

Arguing against Kolb's model and theory of experiential learning, Anderson (1988) suggested the model does not address culture, stating that cultural differences between individuals will provide different learning experiences. Jarvis (1987) believes learning and knowledge were connected, but thought Kolb's ELT fails to examine in depth the nature of the experience or of learning. Jeffs and Smith (1999) suggested that instead of a cycle, some or all of the four stages could occur at the same moment. Boud et al. (1985) thought the learning cycle model did not place enough emphasis on reflection. Long before Kolb's experiential learning model was proposed, Dewey focused considerable attention on experience and learning (Dewey 1929). But in general, Dewey disliked models because the processes were too burdensome because steps might be combined or omitted (Dewey, 1933; Dewey, 1998). Similar learning cycles have been identified. Mirroring Kolb's experiential learning cycle, Córdova et al. (2012) described a cycle that prototypes an idea, explores the idea for empathy, envisions without judging, and enacts to learn from failure. In spite of these issues, Kolb's model of experiential learning continues to provide the foundation to understand how individuals learn, how lessons may be presented to students for optimal learning, and how educators may develop curriculum to reach the diverse needs of the student population (Tennant, 1997).

The Four-Phase Model of Interest Development

Interest and motivation highly correlate with learning outcomes (Gagne et al. 2005). Interest and curiosity increase learning and memory (Fandakova & Gruber, 2021). Hidi and Renninger's four-phase model of interest development (Figure 1, rectangles) describes

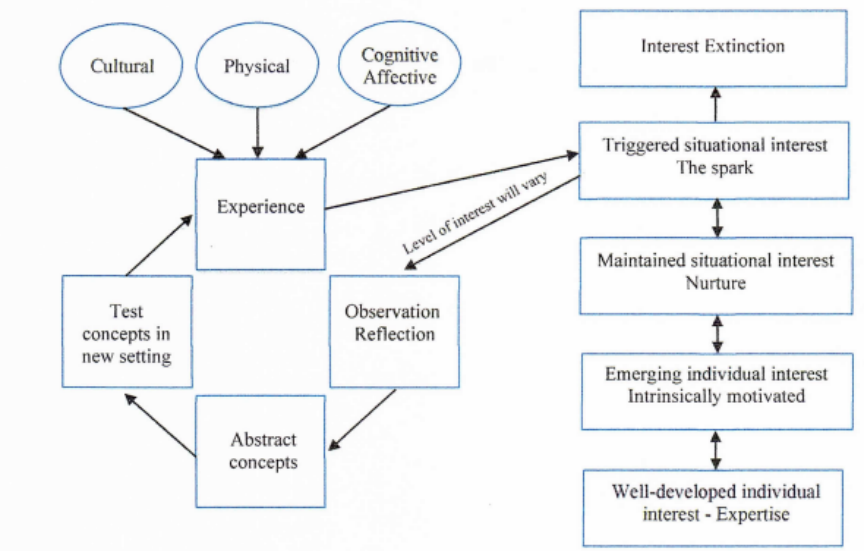

Figure 1. The assimilated model of experiential learning, consisting of Kolb's experiential learning cycle (squares), Hidi and Renninger's four-phase model of interest development (rectangles), and National Research Council's ecological framework (ovals).

how interest is stimulated or diminishes. Interest is a motivational state of an individual who desires to engage or (re) engage with an activity, person, or object (Hidi & Renninger, 2006). Interest also involves affective and cognitive states, and results with an interaction between a person and an object. Hidi and Renninger (2006) identified two types of interest: situational and individual. Situational interest may be momentary or long-lasting, is externally generated, and may motivate and positively influence learning. Individual interest is internal, a person is predisposed to re-engage with something, positively influencing attention and learning. Hidi and Renninger's four-phase model consists of two phases of situational interest and two phases of individual interest. Interest may progress through the phases that are multidirectional; interest may strengthen, remain the same, or diminish, and interest may even disappear altogether.

Phase 1: Triggered situational interest – extrinsic motivation. This level is triggered through the senses, environment, or through interaction with print, providing surprising information, recognition of a person or topic, or an affective source providing intense feelings. Triggered situational interest might motivate the person to (re)-engage with the subject and move to phase 2. For example, a teacher begins class with a demonstration that draws the students' attention.

Phase 2: Maintained situational interest – extrinsic motivation. This level involves focused attention, persistence, and personal involvement, but still externally supported. Maintained situational interest may or may not develop further motivation to (re)-engage with the subject over time.

For example, a teacher utilizes project-based learning, meaningful activities, or works individually with students. Maintained situational interest may or may not motivate the person to re-engage with the object or topic over time.

Phase 3: Emerging individual interest – intrinsically motivated. This level develops strong feelings with new knowledge and a new value system for the subject. The individual desires to follow the interest if given the option, generating personal curiosity and challenges. The work seems to require minimal effort. External support remains necessary from peers, models, or teachers, who also contribute to the knowledge level. For example, teachers support individual interest by enabling a learning environment.

Phase 4: Well-developed individual interest – intrinsically motivated. This level may be a long-term consequence of Phase 3. The individual continues to generate stored knowledge, develop deeper learning, transfer the knowledge to different applications, and cultivate more value and positive feelings. This individual will have sufficient knowledge to contribute to others' knowledge. External support continues to be important. Teachers support well-developed individual interest by providing interaction and challenges that lead to stimulated curiosity and knowledge construction.

Three alternative models of interest development provide contrast to the four-phase model. Alexander (2004) described three stages of interest development: acclimation, competence, and expertise. Academic expertise determines the level of interest, although only individuals out of high school are able to develop expertise, and the progression is irreversible, suggesting that once expertise was developed, it would not diminish.

Hidi and Renninger also provided a second model, suggesting interest was specific to an object and provided positive emotions. The level of emotion to the object helped to determine level of interest (2006). Silvia (2001) developed the model of psychology of constructive capriciousness, which defined interest as a basic emotion. Innate interest was a catalyst for interest development that promoted knowledge, experience, and skills. There were no stages in Silva's model, nor was there any concern for the interaction between the individual and an object.

Ecological Framework

NRC (2009) developed the ecological framework model, which provides a set of lenses that allow examination of the cognitive, physical, and cultural processes of an experience. The term "ecological" describes the relationship between the individuals, the physical environment, and the cultural environment. The ecological framework illustrates how individuals with the same experience will vary in what they learn because of differences in personal development, schooling, family income, family culture, peers, and environment (Bronfenbrenner, 1977; NRC, 2009).

The ecological framework model (Figure 1, ovals) utilizes three lenses:

- **Cognitive/Affective centered lens (people-centered lens)** – examines the development of knowledge, interest, affective responses,

and personal identity, describing how individuals acquire knowledge, affective responses, and develop interest. NRC (2009) proposed the term "people-centered lens" because it focused upon affective and cognitive reactions. Instead of the term people–centered lens, this study will use the term "cognitive/affective," which more clearly defines the focus of the lens.

• **Place-centered lens** – examines the physical aspects of learning. The venue defines what resources, tools, and equipment may be used for the experience. For example, a biology classroom provides a given set of physical resources, whereas a natural history museum provides a completely different set of physical resources. Different physical settings and associated tools define the potential skills and knowledge that may be developed (NRC, 2009).

• **Culture-centered lens** – examines an individual's interactions with associated communities, which defines how that individual acts, performs, experiences, and learns in different environments (NRC 2009). A community provides values, skills, knowledge, and personal identity to the individual (Moll et al., 1992). Conversely, the individual brings prior knowledge and experiences to the community.

The aforementioned are three examples that illustrate three lenses working together to define a low, middle, and high quality experience. A lecture taught in a sterile classroom may be high cognitively, but very low physically or culturally, providing a lower quality experience than a hands-on laboratory, which would have richer physical and social lenses. A trip to the zoo may be higher culturally and physically, but variably low cognitively, providing a medium quality experience (Behrendt & Machtmes, 2017). A trip to a biological field station may provide a high quality experience that is high cognitively, physically, and culturally (Behrendt, 2015). The combination of the three lenses define the overall quality of the experience.

Discussion

By itself, Kolb's learning cycle model does not explain what energizes the cycle. This proposed model illustrates how the combined quality of the three components defining an experience drives the level of interest, which energizes the learning cycle, and will continue the cycle as long as interest is maintained. These three unique models combine to illustrate how experiences generate interest and knowledge. The NRC ecological framework (2009) defines the quality of each experience through the three lenses of cognitive, social, and physical aspects. Kolb's experiential learning model (1984) describes the process of learning. Hidi and Renninger's four-phase interest model (2006) provides the catalyst driving the cycle. This integrated model (Figure 1) illustrates how an experience may be evaluated for quality and may predict the potential for learning through the amount of interest generated.

An experience's three ecological lenses, cognitive/affective, physical, and cultural, combine to define the quality of the experience and create the learner's level of interest. A high quality experience, defined by the energizing

ecological framework, will stimulate the senses and create an increased level of interest, suggesting a directly proportional relationship between the quality of experience and interest. The interest generated by the experience may be extrinsic or intrinsic. Extrinsically, the learner participates with an experience that is energized from someplace outside or beyond the learner. This extrinsic motivation drives the learning cycle, but only so long as the outside forces continue, when the extrinsic motivation ends, the learning cycle ends. When the experience is driven by intrinsic motivation, an interest that is already in place, the learning cycle continues long past the experience. As long as any interest exists, the learning cycle will continue to move forward, resulting in learning.

Conclusion

This proposed model illustrates how the quality of an experience is determined by three factors: the lesson or cognitive aspect, the venue or physical aspect, and the social or cultural aspect. The experience stimulates a level of interest that varies with each student. The interest drives and energizes the learning cycle. As long as interest exists, the learning cycle may continue. Without interest, the learning cycle stops.

This model relates to any learning experience. In reference to education, the proposed model explains student interaction and learning during classes. It is up to the teacher to create quality experiences, which include setting, cognitive, and social scaffolding that motivate students to experience, reflect, think, retest, and learn. A lesson or lab provide the experience. The richness of that lesson or lab defines the quality of the experience. The venue is usually the classroom or laboratory; is there anything physical that might be added to increase the quality of that venue? The cognitive lens provides the lesson and activity. The cultural lens defines how each student experiences that lesson or activity. If the lesson or lab is stimulating, it creates external motivation. Students reflect on the activity, and respond by re-examining their knowledge by assimilating the new data. The experience, reflection, abstraction, and retesting continue until the motivation disappears, often at the end of the lesson or when the student exits the classroom. Whether the learning terminates or continues is determined by the student's level of interest. The experience determines the level of interest. The level of interest drives the learning cycle. ■

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Communities of Practice in Academic Administration: An Example from Managing Undergraduate Research at a Research-Intensive University

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Introduction

Students who participate in undergraduate research experiences (UREs) benefit from a wide range of personal and professional gains, including career development and exposure, an increased sense of belonging and self-confidence, enhanced communication skills, stronger academic performance, faster degree completion, and a greater likelihood of pursuing graduate programs (NASEM, 2017). Recognizing the value of UREs as educational practices, research-intensive universities typically offer multiple avenues for students to engage in research, including organized undergraduate research programs, honors thesis/capstone experiences, course-based undergraduate research experiences (CUREs), and independent faculty apprenticeships that function outside organized programs.

Organized undergraduate research programs are especially valuable for facilitating UREs because the structure inherent in these programs allows for wraparound student and mentor support. For example, program administrators can offer faculty training on promising practices for inclusive mentoring and can enhance students' oral communication skills by requiring each student to present at a campus-wide undergraduate research showcase. Organized programs vary widely in their structures and can have different eligibility requirements, timelines, student and mentor expectations, levels of compensation, applica-

tion and evaluation processes, etc. Some programs are funded internally while others rely at least partially on external grant support; some are campus-wide, while others are facilitated within specific academic and research units. Research-intensive universities typically have multiple organized programs running throughout the year (e.g., our institution has ~25 organized undergraduate research programs, each with its own structure and funding sources).

This wide array of entry points into research (e.g., undergraduate thesis/capstone projects, CUREs, organized programs) often means that UREs occur in disparate corners of campus. However, those who facilitate UREs across an institution can encounter programmatic and administrative challenges in ensuring these experiences run effectively, including issues related to liability coverage, hiring and payment methods, and faculty mentoring practices. Due to the siloed nature of academic and research units within many higher education institutions, those who facilitate UREs across a single campus often tackle challenges by themselves, rather than bringing them up to a campus-wide collective and learning from each other's experiences. In the spring of 2020, undergraduate research program administrators faced the added challenges of quickly adapting to facilitating programs remotely using Zoom. We set out to improve our communication about what is working and not working in implementing UREs across a large research-intensive university in the Pacific Northwest with a long history of academic disciplinary silos. Our team used the advent of COVID-19 in March of 2020 as a catalyst to circumvent disciplinary silos and to seek out opportunities to use the new communication technology (Zoom meetings) to establish a network of student-centered faculty. Those who joined this emerging network faced COVID-19-related challenges as a collective and were better positioned to serve the undergraduate students wanting to continue to engage in faculty-led research remotely.

This article aims to showcase one effective solution for establishing clearer, longer-lasting lines of communication and community-building between those who facilitate UREs on a research-intensive university campus. First, we describe the Research for Undergraduates Network (RUN), a community of practice (CoP) of undergraduate research mentors and those who facilitate undergraduate research programs who meet regularly to collaborate and support each other by sharing promising practices. Second, we highlight various outcomes resulting from this collaborative network. Finally, we offer insights for ways this model could be implemented and sustained at other research-intensive institutions.

The Community of Practice Model (CoP)

The term "community of practice" was first introduced by Etienne Wenger, an education scholar and practitioner, who described CoPs as "groups of people who share a passion for something that they know how to do and who regularly interact to learn how to do it better." Virtual CoPs serve as a meeting place that can be joined at any time by like-minded individuals. They provide an opportunity for motivated faculty to connect around similar topics, passions, and areas of expertise, sharing what works well and what doesn't. Vir-

tual CoPs can bring opportunities for growth and innovation in the classroom, the laboratory, or out in the field.

The Research for Undergraduates Network (RUN) Model

In early 2020, several undergraduate research program administrators at a large research-intensive university from different corners of campus indicated that they would benefit from a space where they could learn from others doing similar work. While there were plans to initiate regular in-person meetings, the emergent need to address how our research programs were affected by the COVID-19 global pandemic required us to re-organize almost immediately. In response to the siloed nature of undergraduate research administration on our campus, in addition to challenges related to the pandemic, the central office for undergraduate research and scholarship launched Research for Undergraduates Network (RUN) in spring 2020 at our research-intensive university. RUN is a CoP of undergraduate research mentors and those who facilitate undergraduate research programs. While RUN is coordinated from within our university's centralized office of undergraduate research, it is a campus-wide network that has continued to grow throughout the pandemic. RUN consists of two types of programming 1) weekly meetings with campus-wide partners and 2) campus-wide RUN-sponsored events.

As a first step to creating RUN, staff within the office of undergraduate research curated a list of faculty members and administrators on our campus who have a relationship to UREs (e.g., coordinate a URE program, mentor many undergraduate researchers, advise students within a thesis-based academic program, conduct research on UREs, etc.). We then sent out a mass email to these potential participants inviting them to join regular Monday morning meetings to engage in campus-wide conversations about URE-related issues.

As a result of this message, a core group of about fifteen RUN participants have met every Monday morning since April 2020. This group consists of faculty members and administrators who come from various parts of campus, including several academic colleges and departments, a state agency that is connected to our institution, a marine science center with state and federal agency partners, various student support programs, the Honors College, the Provost's Office, and Faculty Senate (see Appendix A). RUN is built upon a CoP framework, which has been defined as a "persistent, sustaining, social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history, and experiences focused on a common practice and/or mutual enterprise" (Barab, Barnett, & Squire, 2002, p. 495). Our virtual CoPs served as a meeting place for a group of motivated faculty to connect around similar topics, passions, and areas of expertise, sharing what works well pedagogically in the COVID-19 environment. Our virtual CoP has facilitated the growth and innovation in the classroom, the laboratory, and in the field because we each brought different problems and solutions to the group on a regular basis. Wenger's (1998) model allowed us to grow from each other's experiences.

We chose this framework because it is effective for building faculty con-

nectedness and belonging and inspiring innovation and improvement within an institution (Eib & Miller, 2006). Each of the RUN participants is deeply committed to providing opportunities for UREs and self-selected into the group. As is typical within CoPs, the group is always open to newcomers, and members participate at various levels (Nistor & Fisher, 2012). Discussion topics primarily include issues related to UREs (see examples in Appendix B), but the meetings have also become a space for participants to support each other personally and professionally.

In addition to these weekly meetings, RUN sponsors campus-wide events. For example, we have offered several campus-wide workshops on promising practices for effective undergraduate research mentoring and one large summit of URE liaisons across campus to discuss the implications of COVID-19. Of the twenty-six attendees at this summit, 75% of post-assessment respondents (n=6) felt that this event would influence how they would continue their research program during the pandemic. In the winter of 2021, we organized a 'lunch & learn' series, which included informal lunch-time sessions allowing participants to dig deeper into issues such as how busy mentors can streamline UREs by using online tools and tips for practicing culturally responsive mentorship. The associate director of the office of undergraduate research initially took responsibility for facilitating weekly meetings and for developing and facilitating RUN-sponsored events. More recently, this responsibility has been decentralized to the members of the RUN group, who each select a month to host the meeting, which involves inviting speakers and planning discussion items. This revised model reduces the pressure on the associate director who, when not planning or facilitating, can move into the role of a RUN participant.

Network Outcomes

Coming together as a group to share strategies for resolving programmatic and administrative challenges has proven fruitful on many levels. Below are several examples of synergistic outcomes emerging from RUN. Appendix B highlights a list of discussion topics the group engaged with during weekly meetings.

Gathering insight from multiple stakeholders. We have spent significant time discussing challenges related to the COVID-19 global pandemic and how to adapt UREs to remote contexts. We invited the chair of our campus's research continuity and resilience plan to learn more about how research will continue during COVID-19 and provide the chair with valuable insight into how UREs should be taken into consideration when finalizing the plan. We invited the director of student health services to help us understand how the university is approaching COVID-19 testing and contact tracing. We invited guest speakers from our online degree-granting program to talk with us about strategies for building community among remote researchers. We also invited colleagues from other institutions to share information about how they organized their UREs.

Centering equity in undergraduate research. Several of our conversations have centered around the importance of promoting and sustaining anti-racism in research, curriculum development, and in the day-to-day activities

in laboratories. As a group, we decided to use our sphere of influence and collective voice to put forth a proposal to our office of faculty affairs for support in developing and implementing anti-racism and inclusion training for STEM undergraduate research faculty mentors. This proposal was funded, providing financial support to hire a student to help develop educational materials and for catering the faculty training in 2021 (COVID-19 permitting).

Navigating complex higher education policies. We have recognized several important aspects of undergraduate research liability coverage that required clarification on our campus. We have clearly articulated our liability questions and have been working with our insurance and risk management office to clarify how we can better inform students and their mentors about coverage. Through this process, we explored inequities in how students are paid and the resulting implications of whether or not the university views them as employees (e.g., whether they qualify for Worker's Compensation, etc.).

Strengthening our recruitment and application processes. One participant asked the group for feedback on their URE application process, so we spent time reviewing each other's processes and sharing collective wisdom. In doing so, we all paid close attention to the ways our applications attempted to promote equity, social justice, and inclusion. For example, several participants reworded problematic questions in their program applications to be more inclusive (e.g., one participant changed a question on their program application from "What is an obstacle you have faced in getting to where you are now and how have you overcome it?" to "What is an obstacle you have faced in getting to where you are now and how have you addressed it?" in order to ensure that students who are facing ongoing challenges were able to respond accordingly.

Engaging online learners in undergraduate research. An idea emerged from the group regarding promising practices for facilitating UREs remotely, which we are now developing into a National Science Foundation (NSF) Improving Undergraduate STEM Education grant proposal with the potential to expand access to UREs for online learners.

Efficiently informing and growing awareness of campus and local community groups. We have invited many guest speakers to our standing meetings. In doing so, RUN members have been able to get information simultaneously, instead of independently. For example, the director of global scholarships joined us to speak about scholarship opportunities for undergraduates in research, the director of graduate school recruitment joined us to speak about helping undergraduate researchers prepare for graduate programs, and an outreach programs and events manager joined us to talk about delivering effective remote showcases of student research.

Sharing best practices for federally-funded programs. One of our CoP members is part of the NSF Geosciences Research Experience for Undergraduates (REU) Principal Investigator network. They regularly exchange recommendations with other REU teams across the country and bring best practices back to the RUN network.

Insights for Implementation and Sustainability at other Institutions

We have significantly benefited from participating in a CoP for undergraduate research administrators and feel this network model (or a version of it) could be adapted on other campuses. Below we discuss various considerations for developing and sustaining a network for undergraduate research administrators at other institutions.

How can undergraduate research CoPs be initiated?

A first important step is creating a list of faculty and staff members on campus that have a stake in how UREs are facilitated (e.g., those who coordinate URE programs, mentor many undergraduate researchers, advise students within a thesis-based academic program, or conduct research on UREs). Emails can be sent to those on the list announcing the launch of the network with a plan for regular meetings and any related programming, asking for referrals of others who might be interested in joining. A wide net can be cast by also sending the launch email via campus-wide channels (e.g., all faculty/admin emails, newsletters, etc.). Inclusivity and diversity of members is key when trying to grow the network; we recommend including inviting graduate students, post-doctoral researchers, and off-campus partners.

Continuing to keep the network open to new membership allows the group to invite new perspectives and energy. One way to attract new members is to continue to pitch the network at campus-wide events and during meetings with faculty and administrators. We have found that highlighting outcomes from the network and mentioning specific members can help to promote curiosity and, ultimately, buy-in.

How do you sustain an undergraduate research CoP on your campus?

Ensuring that participants continue to attend weekly meetings can be a challenge for informal and voluntary groups (Clawson & Bostrom, 1996). Here, we suggest several strategies for sustaining group participation. First, meetings, even underpopulated, should never be cancelled. If the primary facilitator cannot attend, another participant can be assigned as the facilitator that week. If meetings are occasionally cancelled, the reliability of the group is compromised, and participants may begin to schedule other appointments during the regular meeting time. Maintaining the meeting day and time each week will ensure that participants know the group will be there, regardless of scheduling conflicts for the facilitator. Consistency is key. This strategy is also more sustainable for the primary facilitator because it allows them to avoid having to schedule multiple meetings with many participants.

Ensuring that meetings are virtually accessible will make it easier for interested participants to join. In our case, we feel that participation has remained high because network members were not required to travel across our large campus to attend. In addition, it has allowed for members who are not located on our primary campus to continue to attend (e.g., a participant from our marine station and an agency partner). In a post-pandemic environment, it is likely we will sustain the group by providing a mix of in-person and virtual (or both

simultaneously) gatherings to enable more faculty and administrators to regularly attend these meetings (i.e., we will likely draw on Beatty's (2019) hybrid flexible design to model RUN meetings).

How do you maintain relevance and keep conversations going?

A critical aspect of sustaining a voluntary group like RUN is to maintain relevance for participants. There are a seemingly endless number of topics that can be explored as a group to strengthen UREs. For example, the group could explore staffing demands of various research programs, how to train undergraduates in responsible conduct of research, or how to help students translate research skills and experiences into materials for job and graduate school applications (see Appendix B for more topic ideas).

It is important to include some unstructured time during the group meeting to check in with each participant. We have found that, in many cases, participants want to address issues that arose during the week (ones we could not have anticipated) and get feedback from the group. Conversations begin during these check-ins that will interest the group, grow the visibility of shared experiences, and allow the group to support one another. Each member should feel empowered and comfortable bringing issues for conversation to the meetings. The facilitator can do this by encouraging members to share challenges and reminding members that they can leverage the group's wisdom and be collaborative thought-partners as challenges arise in their work.

Conclusions

Communities of practice can offer a new layer of support in the coordination of undergraduate research programs at research-intensive universities. In addition to sharing successful practices, identifying and overcoming chronic obstacles to supporting UREs, members of a CoP can address common challenges, such as coordinating undergraduate research programs during a global pandemic. As such, the network may easily expand by making connections with internal and external partners and bringing resources back to the group.

Lastly, we have found that while our CoP launched quickly due to the health crisis, the consistency in coming together weekly has generated a more trusting, caring, inclusive space for participants. We have questioned one another's practices, made challenging suggestions, and intentionally addressed power dynamics within the group, our institution, and the broader research community. We have found that being together in community (albeit virtually for the time being) has been valuable in creating immediate and longer-term positive change within and across our undergraduate research programs. We hope undergraduate research administrators from other institutions will be able to draw from our experiences and work collaboratively to increase access to, and sustain, UREs on their respective campuses. ■

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Appendix A

Titles and affiliations of the core group of RUN participants

Title	Unit
Associate Director of Undergraduate Research	Provost's Office
Associate Director of Student Engagement	College of Science
STEM Leaders Program Coordinator	Provost's Office
Undergraduate Programs Coordinator	Oregon Sea Grant
Academic Advisor	Honors College
Academic Advisor	College of Agricultural Sciences
Assistant Vice Provost of Undergraduate Education, Associate Professor of Ethnic Studies	Provost's Office, College of Liberal Arts
NSF REU Program Director, Academic Programs Manager & Senior Instructor	Hatfield Marine Science Center
Experiential Learning Coordinator	College of Earth, Ocean, & Atmospheric Sciences
Faculty Senate President, Professor of Sociology	Faculty Senate, College of Liberal Arts
Student Engagement Coordinator	College of Agricultural Sciences
Associate Professor	College of Engineering
Associate Professor	College of Veterinary Medicine

Appendix B

A list of discussion topics the community of practice engaged with during weekly meetings

	Topics Covered
1	Anti-racism in research
2	Virtual student showcase/symposia logistics (with campus guest speaker)
3	Global student opportunities (with campus guest speaker)
4	COVID-19 concerns and adjustments in research and teaching environments, including summer research programs (with campus guest speaker)
5	Recruiting and supporting students of color and students from other under-served backgrounds
6	Application process review for research programs
7	Liability considerations for students that have stipend (instead of paid hourly)
8	Building community among remote researchers
9	Faculty involvement in undergraduate research (e.g., expectations and mentoring)
10	Preparing undergraduate researchers for graduate programs
11	Responsible conduct of research
12	Processes for connecting students and faculty
13	Incentivizing quality mentoring of undergraduates in research (e.g., P&T policies)


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